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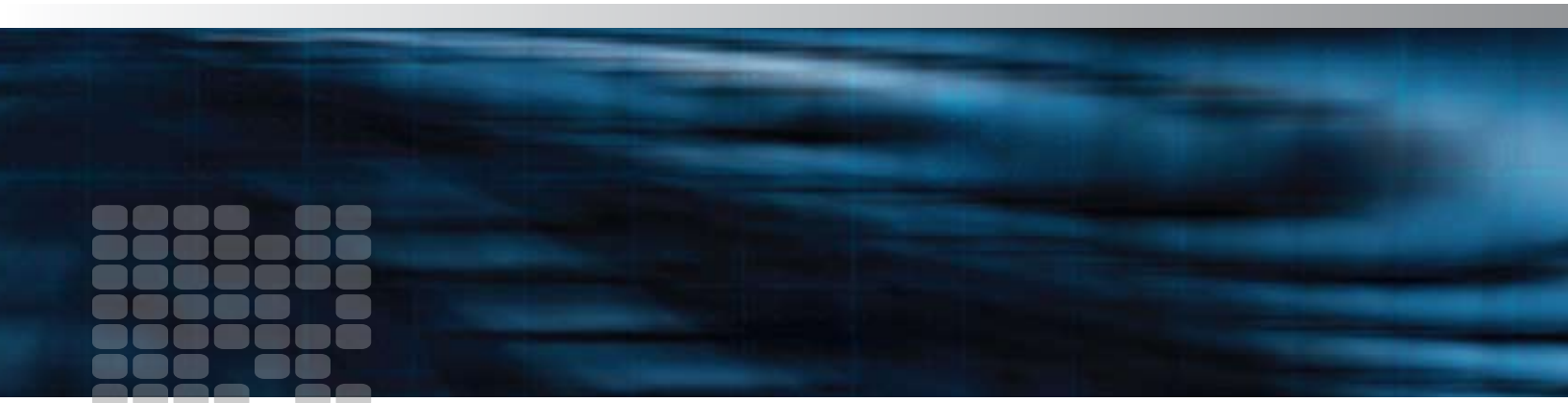

Master Control Switcher
Functional Operation and Configuration Manual

Edition F, for use with system software version 3.1
175-000287-01

IconMaster

Master Control Switcher

Functional Operation and Configuration Manual

Edition F, for use with system software version 3.1
January 2009

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Preface

Manual Information

Purpose

This manual details the operation procedures; and software installation procedures, configuration procedures, and logo creation procedures for the IconMaster master control switcher.

This manual is part of a two-part set. This manual provides detailed information on IconMaster control panel operation and configuration procedures; hardware installation and configuration procedures are provided in a separate manual. A complete setup will include

- Installing the IconMaster control panel[1]
- Installing optional NEO modules[1]
- Mounting a NEO frame in a rack[1]
- Configuring NEO modules (this information is provided in a separate manual)
- Connecting internal and external routers[1]
- Configuring control panel components
- Control panel operations
- Optional software installation and operation

Audience

This manual is written for engineers, technicians, and operators responsible for the operation of the IconMaster master control switcher.

[1] This information is provided in the *IconMaster Master Control Switcher Hardware Installation and Configuration Manual*.

Revision History

Table P-1. Revision History

Edition	Date	Comments
A	May 2007	Initial manual release
B	June 2007	• Added information on coordinating GPI/ GPO and machine control settings in ICU • Added information on setting GPO operation precedence

C	July 2007	• Added information on Fast Reset function
		• Updated GUI display and descriptions for
		  • Audio configuration
		  • A/O Mapping
		  • Aux Bus
		  • Effects
		  • Audio clusters
		  • System Config
		  • Panel Button configuration settings

D	March 2008	• System software release 2.2 (Compatible with Navigator/ IconMasterNAV 4.2)
E	August 2008	• System software release 3.0 (Navigator 4.3 and later is required for compatibility with Iconmaster 3.0 and ISCP)
F	January 2009	• System software release 3.1

Writing Conventions

To enhance your understanding, the authors of this manual have adhered to the following text conventions:

Table P-2. Writing Conventions

Term or Convention	Description
Bold	Indicates dialog boxes, property sheets, fields, buttons, check boxes, list boxes, combo boxes, menus, submenus, windows, lists, and selection names
Italics	Indicates E-mail addresses, the names of books or publications, and the first instances of new terms and specialized words that need emphasis
CAPS	Indicates a specific key on the keyboard, such as ENTER, TAB, CTRL, ALT, or DELETE

Table P-2. Writing Conventions *(Continued)*

Term or Convention	Description
Code	Indicates variables or command-line entries, such as a DOS entry or something you type into a field
>	Indicates the direction of navigation through a hierarchy of menus and windows
hyperlink	Indicates a jump to another location within the electronic document or elsewhere
Internet address	Indicates a jump to a Web site or URL
Note	Indicates important information that helps to avoid and troubleshoot problems

Obtaining Documents

Product support documents can be viewed or downloaded from our website. Alternatively, contact your Customer Service representative to request a document.

Unpacking/Shipping Information

Unpacking a Product

This product was carefully inspected, tested, and calibrated before shipment to ensure years of stable and trouble-free service.

1. Check equipment for any visible damage that may have occurred during transit.
2. Confirm that you have received all items listed on the packing list.
3. Contact your dealer if any item on the packing list is missing.
4. Contact the carrier if any item is damaged.
5. Remove all packaging material from the product and its associated components before you install the unit.

Keep at least one set of original packaging, in the event that you need to return a product for servicing.

Product Servicing

IconMaster systems are not designed for field servicing. Except for certain designated options as described in this manual, all hardware upgrades, modifications, or repairs require you to return the product to the Customer Service center.

Returning a Product

In the unlikely event that your product fails to operate properly, please contact Customer Service to obtain a Return Authorization (RA) number, then send the unit back for servicing.

Keep at least one set of original packaging in the event that a product needs to be returned for service. If the original package is not available, you can supply your own packaging as long as it meets the following criteria:

- The packaging must be able to withstand the product's weight.
- The product must be held rigid within the packaging.
- There must be at least 2 in. (5 cm) of space between the product and the container.
- The corners of the product must be protected.

Ship products back to us for servicing prepaid and, if possible, in the original packaging material. If the product is still within the warranty period, we will return the product prepaid after servicing.

Safety

Carefully review all safety precautions to avoid injury and prevent damage to this product or any products connected to it. If this product is rack-mountable, it should be mounted in an appropriate rack using the rack-mounting positions and rear support guides provided. It is recommended that each frame be connected to a separate electrical circuit for protection against circuit overloading. If this product relies on forced air cooling, it is recommended that all obstructions to the air flow be removed prior to mounting the frame in the rack.

If this product has a provision for external earth grounding, it is recommended that the frame be grounded to earth through the protective earth ground on the rear panel.

IMPORTANT! Only qualified personnel should perform service procedures.

Safety Terms and Symbols in this Manual

WARNING

Statements identifying conditions or practices that may result in personal injury or loss of life. High voltage is present.

CAUTION

Statements identifying conditions or practices that can result in damage to the equipment or other property.

Terms and Symbols on the Product

DANGER: High voltage; indicates a personal injury hazard immediately accessible as one reads the marking.

WARNING: Indicates a personal injury hazard not immediately accessible as one reads the marking.

CAUTION: Indicates a hazard to property including the product or to take Attention and refer to the manual.

Protective ground (earth) terminal.

Fuse. Replace with same type and rating of fuse.

Observe precautions for handling electrostatic sensitive devices.

Embedded Software License Agreement

The software embedded in this product incorporates the VxWorks Run-Time Module, and the following paragraphs are applicable. You are prohibited from:

a. copying the Run-Time Module, except for archive purposes consistent with your archive procedures;

b. transferring the Run-Time Module to a third party apart from the product containing the Run-Time Module;

c. modifying, decompiling, disassembling, reverse engineering or otherwise attempting to derive the source code of the Run-Time Module;

d. exporting the Run-Time Module or underlying technology in contravention of applicable U.S. and foreign export laws and regulations; and

e. using the Run-Time Module other than in connection with operation of the product in which it is embedded.

Any further distribution of the Run-Time Module is subject to the same restrictions set forth herein. Wind River Systems, Inc. and its licensors are third party beneficiaries of the End User License Agreement and the provisions related to the Run-Time Module are made expressly for the benefit of, and are enforceable by, Wind River Systems, Inc. and its licensors.

The laws of the Province of Ontario shall govern this Agreement. Updated January, 2005.

Chapter 1

Introduction

Overview

The IconMaster control panel package includes either a hardware control panel or a software control panel. Either panel provides full control of the IconMaster system and is intended for use in simplified live environments. The optional audio control panel adds greater flexibility of control in more demanding live or fully manual environments.

The operation of the IconMaster system involves the main control panel and the optional audio control panel. The configuration of the IconMaster system is performed using IconMaster configuration utility (ICU) software on a PC. In this chapter, the various controls illustrated in Figure 1-1 are described as to function and location. Additional chapters provide detailed information on how to operate an IconMaster control panel. A quick reference chart is available on page 201 through page 204. This quick reference chart provides a list of the various busses, functions, and configuration utilities relationships.

This chapter covers the following topics:

- "Control Panels" on page 2
- "Primary Control Bus Cluster" on page 5
- "Parameter Adjustment Control Cluster" on page 12
- "Transition Control Cluster" on page 6
- "Transition Functions Cluster" on page 9
- "Configurable Clusters 1 and 2" on page 11
- "Optional Audio Control Panel" on page 14
- "Software Tools" on page 15

You will need to configure your IconMaster hardware before you are able to operate the control panels. Hardware configuration procedures are covered in a separate manual.

Control Panels

IconMaster has two control panel options.

The IconMaster hardware control panel features a 12-input desk-mount or rack-mount control panel with LED buttons for bus selection and transitions as well as fully-configurable LCD buttons. Options include an “intelligent” audio control panel, and touch-screen configuration and control.

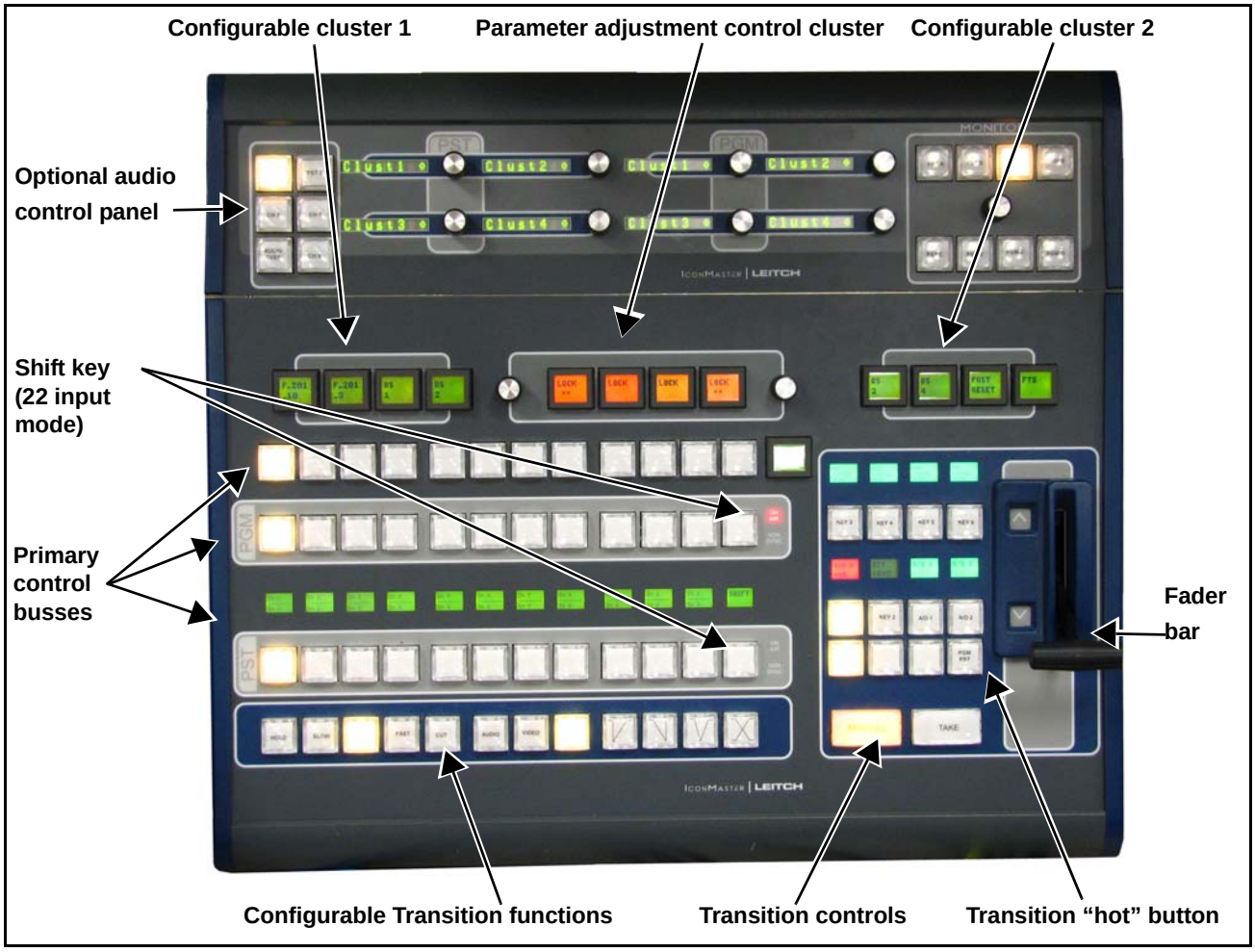


Figure 1-1. IconMaster Hardware Control Panel

The IconMaster software control panel is designed to work with a touch screen monitor. Configured using CCS Navigator (an optional license is required), this software control panel could be used as a primary or backup control panel.

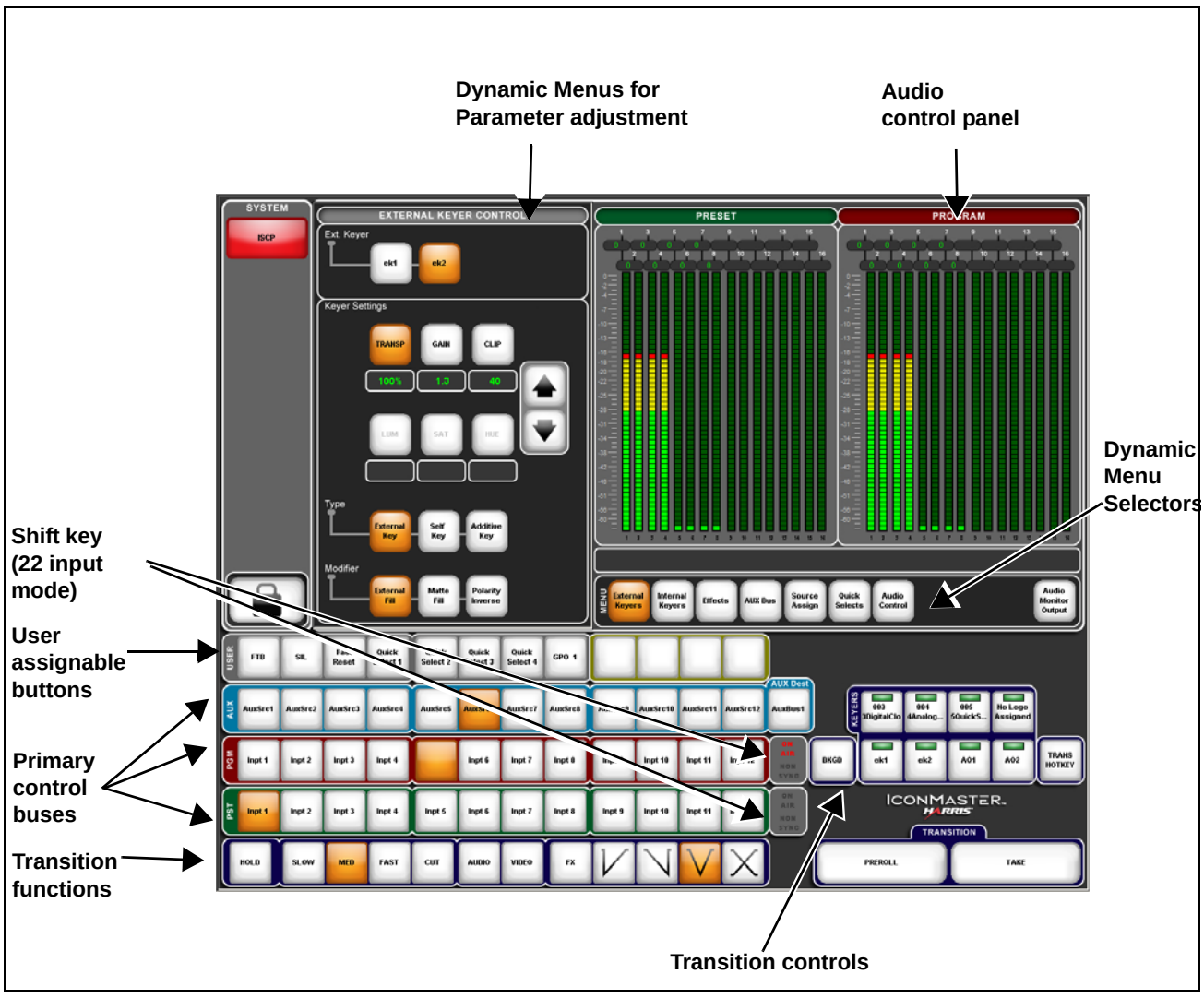


Figure 1-2. IconMaster Software Control Panel

Main differences between the hardware and software control panels include:

- ISCP does not have fader bar.
- The functions of the Parameter adjustment control cluster are handled by the Dynamic menus.

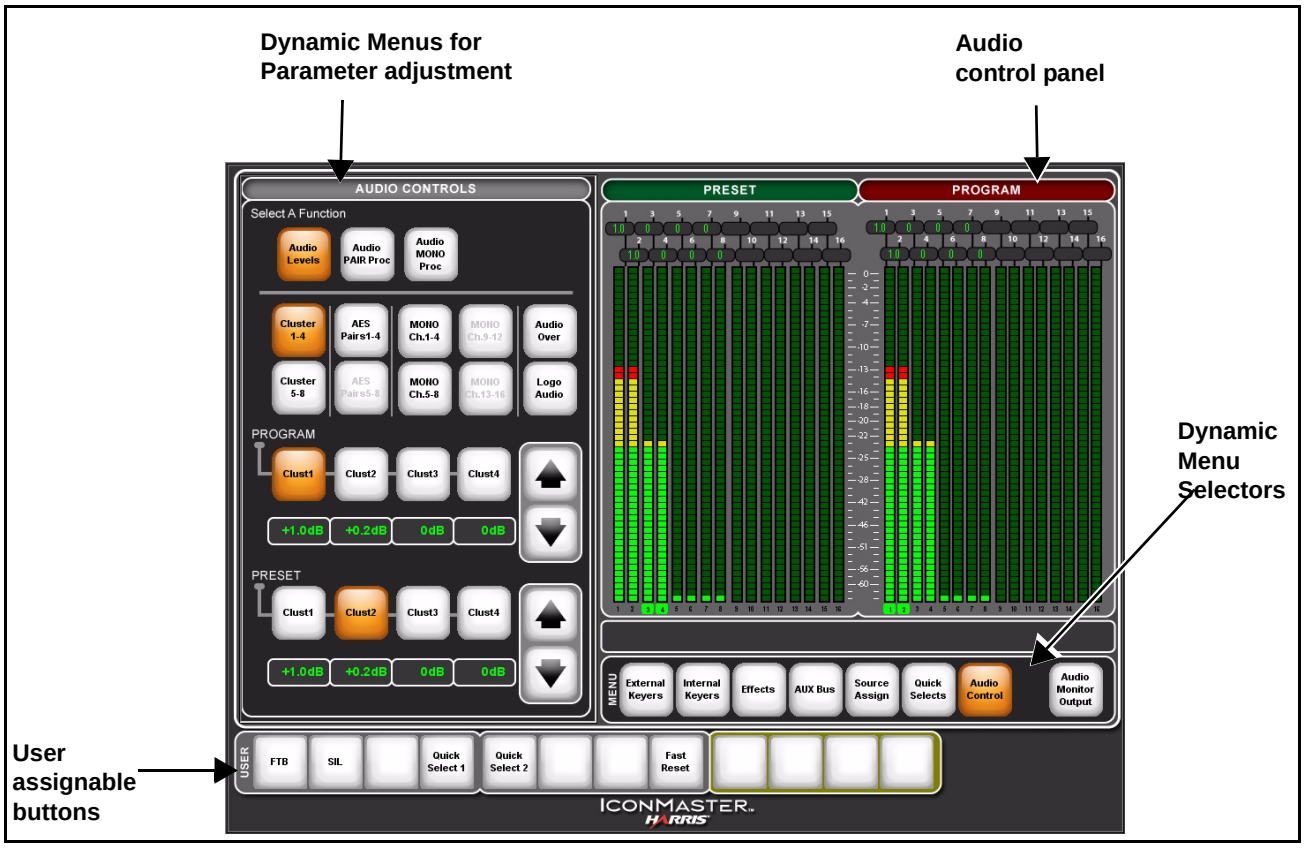


Figure 1-3. ISCP-LITE Panel

Primary Control Bus Cluster

At the center of the control panel, there are 3 primary buses: Auxiliary (Aux), Preset (PST), and Program (PGM). These buses are used to monitor or select inputs and outputs. The PST and PGM buses share 12 LCD character input source display windows (located between the PGM bus and PST bus). The display windows show the name of the source currently assigned to each of the inputs. A shift key becomes available on both the PGM and PST buses when you have configured the IconMaster to operate in the 22 input mode. (The Auxiliary bus does not support 22 input mode.)

See Chapter 2: “Inputs and Outputs” for information about the primary busses.

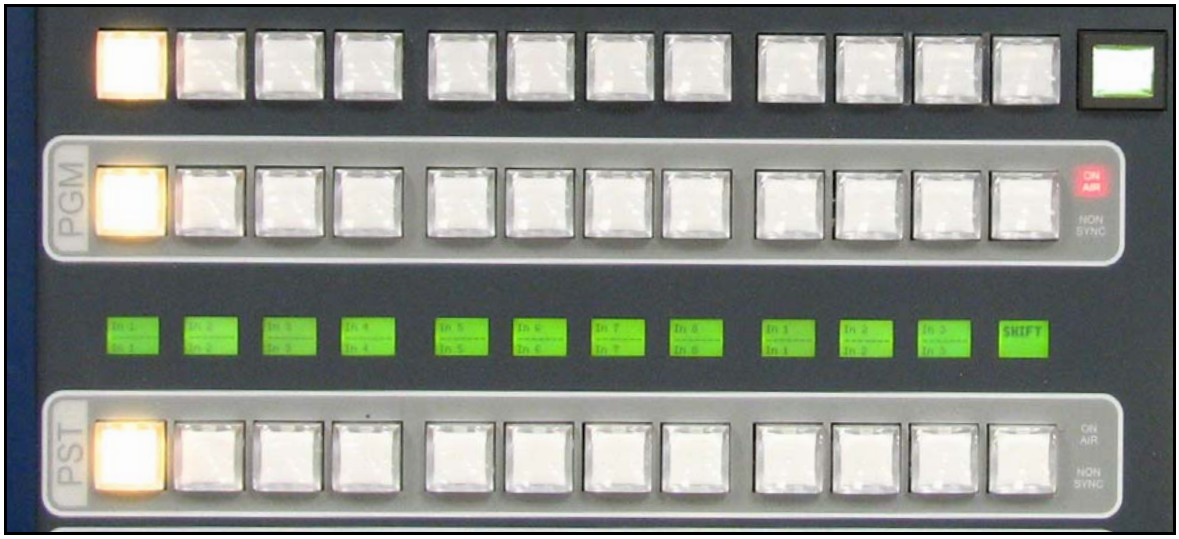


Figure 1-4. PST, PGM, and AUX Buses on the Hardware Control Panel

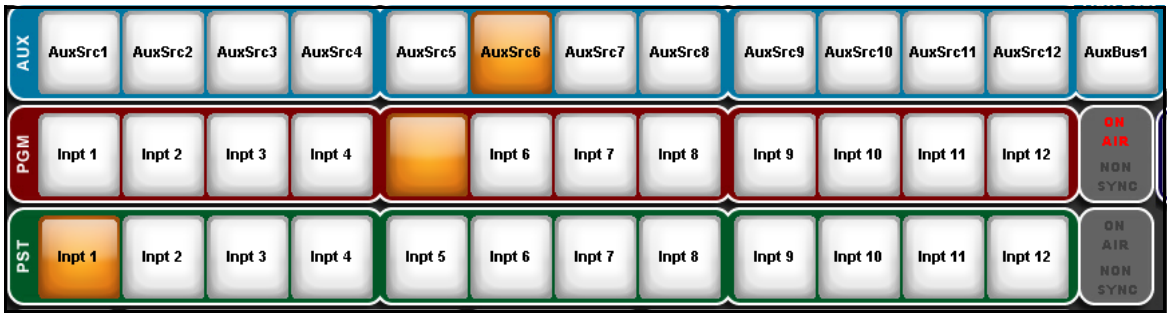


Figure 1-5. PST, PGM, and AUX Buses on the Software Control Panel

Transition Control Cluster

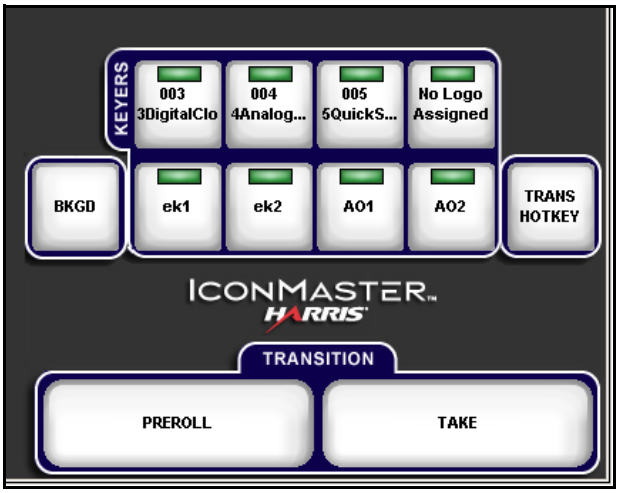


Figure 1-6. Transition Control Cluster on Software Control Panel

Figure 1-7. Transition Control Cluster on Hardware Control Panel

The Transition Control cluster, which is located at the lower right corner of the control panel, consists of buttons that determine the state of the program output upon execution of a transition. (See Figure 1-7.) The buttons in this cluster

determine the elements (if any) that will be involved in the next transition that will occur when the **Preroll** or the **Take** button is selected. The transition can be a background transition, key transition, audio-over transition, or any combination of the three.

See Chapter 3 for detailed information about Transition Control functions.

Note

You can configure these controls through the IconMaster Configuration Utility. See Chapter 7: “IconMaster Configuration Utility” on page 135 for instructions.

Key Buttons

A key makes it possible to cut a hole in the program input and replace it with a separate key fill of the same size.

- “External” key buttons allow you to display an external device such as a character generator.
- “Internal” key buttons[1] allow you to display internal branding elements from an MGI-390x module.

Each key button has a corresponding LCD (input source) display window. The LCD display window can be configured to indicate the source ID. When the key button is illuminated, the keyer will transition to the opposite state (ON | OFF) during the next transition.

The internal keys LCD displays indicate the name and logo number of the logo currently loaded in each of the four logo keyers. If the internal keyer has an associated logo audio, the logo number is supplemented with a -A (MGI-3902/ MGI-3903 installations only).

The internal key LCDs can be OFF, GREEN, or RED.

- OFF—No MGI-390x board is detected, or the IconMaster is licensed as an IconMaster LITE
- GREEN—Logo keyer is available and not on-air
- RED—Logo keyer is on-air

The external keys LCD displays’ illumination have four colors: OFF, GREEN, ORANGE, and RED.

- If no external device has been assigned to the key, or the external key signal is not present, the LCD display color will be OFF.
- If the key source is ready to put on-air, but currently not on-air, the LCD display color will be GREEN.
- If the key source is non-sync and off-air, the LCD display color will be ORANGE.
- If the key source is on-air, the LCD display color will be RED.

[1] These keys are not functional on IconMaster LITE.

- Internal logos (MGI-3902/MGI-3903 only) can have audio associated with them. When the logo is played, the audio will be similar to an audio over. (Internal logo audio does not play on PST; audio only plays when the logo goes to air.)

The key source and attributes can be set using the Parameter Adjustment Control Cluster (see page 12). Transitioning the keys is accomplished using the Transition Function cluster (see page 9).

Audio Over Buttons

An audio-over allows you to reduce the level of the audio on the program channel and mix a separate audio channel on top. When an audio over button is illuminated, the audio over will transition to the opposite state (ON | OFF) during the next transition.Each audio-over button has a corresponding LCD (input source) display window. The LCD display window can be configured to indicate the source ID. The audio-over LCDs can display two colors, RED and GREEN.

GREEN—Keyer is not on-air.

RED—Keyer is on-air.

The audio-over source and attributes can be set using the Parameter Adjustment Control cluster (see page 12). Transitioning the audio-over is accomplished using the Transition Control cluster (see page 6).

Background (BKGD) Button

The **BKGD** button, when illuminated, indicates that a background transition (from the **Preset** bus to the **Program** bus) will occur when you select **Take** or **Preroll**. When the **BKGD** button is not illuminated (i.e., not enabled for next transition):

- The PST output will display the same background video source as the PGM, and no background transition will be performed.
- No effects will operate.
- On the ISCP, the PST audio gain controls will not be available in the Audio Dynamic menu, and the PST VU meters will track the current PGM VU audio
- On the optional audio control panel, the four PST audio gain LED displays will go dark and the four control pots will not function. This is a precautionary measure because, if you change the audio levels for the PST source, you will also change the audio levels for the PGM source (since the PST and PGM source is the same). You could inadvertently change the PGM audio without realizing it. You can change audio levels for the source through the audio control panel PGM controls.

Transition “Hot Key” Button

The transition “hot key” button allows you to take a key or an audio over directly on air without requiring a video transition or affecting other on-air content. It also allows a background transition to be hotkeyed without affecting other on-air materials.

Preroll Button

The **Preroll** button allows the IconMaster system to activate a different piece of equipment to perform the event through a predetermined control type. Both the preroll and the preroll duration are set using the IconMaster configuration utility software.

Take Button

Selecting the **Take** button causes the next transition to start immediately. (You set up the transition event that you want the system to perform, and then you press the **Take** button to cause that event to occur.)

Fader Bar

The optional fader bar provides a manual method of performing transitions. The type of the transition (fade-cut, cut-fade, V-fade, cross-fade) is preselected in the Transition Functions cluster of the control panel (page 10). The rate of the transition is determined by the speed at which the fader bar is moved.

Fader bar operations can be stopped mid-stream, or even reversed to the start. The fader bar can be moved back and forth through the transition. When the fader bar reaches either the top or the bottom end of its travel, the transition is complete, and another transition will begin if the fader is moved again. The fader bar can start transitions from either the top or the bottom position. The end stop LEDs indicate the direction of movement required to complete the transition.

You cannot perform effects with the fader bar. Attempting to do so will result in inadvertent breakaways. For best results, do not use the fader bar with breakaways.

Transition Functions Cluster

The Transition Functions cluster (located on the bottom row of the control panel to the left of the Transition Control cluster) consists of 12 buttons.

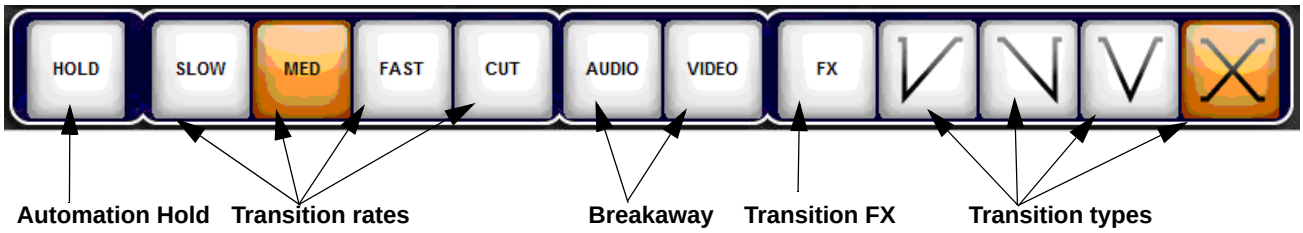


Figure 1-8. Configurable Transition Functions

In the default configuration, the Transition Functions cluster allows the selection of type and rate of a transition that is to occur upon activation of the next transition. See Chapter 3: “Transitions” for detailed information.

Transition Functions buttons on the IconMaster Software control panel are not configurable. Transition Functions buttons on the Hardware control panel are configurable using the IconMaster Configuration Utility. You can predefine the buttons from a list of available functions. In this way, you can customize the operation of the panel for optimum ease of use. See page 157 for instructions.

Table 1-1. Configurable Transition Functions Cluster buttons

Button	Function
Automation Hold	The Automation Hold button allows you to stop the IconMaster from responding to Automation commands.
Transition Rate (4)	The transition rate buttons allow you to set transition duration/speed to a prespecified number of frames for the different transition types (cross-fade, V-fade, cut-fade, fade-cut). These transition rates are adjustable using ICU.
Transition FX	The **FX** button allows you to select a squeezeback effect as the next transition type. These effects are set up and named in the Effects dialog box of the IconMaster configuration utility. You can create and store up to 16 effects. These effects can be single-step effects, or they can be complex, multi-transitional visual effects. (This control is configured through the ICU Effects dialog box, as described in Chapter 7: “IconMaster Configuration Utility”.)
Transition Type (4)	The transition type buttons allow you to select certain transitions (cut-fade, fade-cut, V-fade, or cross-fade). When you select a new transition type, the previous selection is cancelled (if no breakaways are assigned).
Breakaway (2)	Using the breakaway buttons you can take a transition in which the audio and video signals do not automatically follow each other (the audio and video signals are split). You can perform Audio Source, Video Source, or Transition Type breakaways. See page 79 for information.

Configurable Clusters 1 and 2

Located on the upper left and right side of the main control panel are configurable clusters 1 and 2 (see Figure 1-1 on page 2). Via the ICU, you can change the default assignments for all of the buttons in these configurable clusters. Table 1-2 lists the functions, with their appropriate actions, which can be assigned to the configurable cluster buttons.

Table 1-2. Configurable Cluster Options

Display	Function	Operation
FTB	Fade to Black	Causes the video program outputs to immediately fade to black.
SIL	Fade to Silence	Causes the audio program outputs to immediately fade to silence

FAST RESET*	Fast Reset	• Quickly resets audio gain and/or keyer control or audio input **PROC** settings for an IconMaster input source
		• Quickly resets specific audio settings for
		  • a keyer and its parameters
		  • an audio over, its gains, parameters , and mix ratio
		  • a complete PST or PGM source
		  • individual AES gains
		  • individual cluster gains
		  • a mono channel gain

QS1 to QS4 (QS1 to QS8 in HRCP)	Quick Select	Causes the recall of the previously stored combination of function attributes
GPO1 to GPO7 (GPIO1 to GPIO in HRCP)	GPI Output Control	Causes the trigger of the GPO that was assigned using the IconMaster configuration utility software
CH1 to CH7 (Note: The LCD display will show the host name assigned in the **Network Config** dialog box.)	Frame Select	Changes the IconMaster system that is being controlled by the IconMaster control panel
CLOCK	Clock	Displays time-of-day clock (needs to be configured on the MKE hardware)
TIMER	Segment Timer	Displays the segment timer; press to reset segment timer (needs to be configured on the MKE hardware)

* The default location for the Fast Reset function is in configurable control cluster 2.

Parameter Adjustment Control Cluster

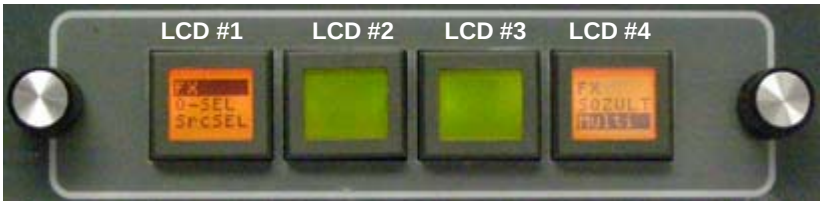


Figure 1-9. Parameter Adjustment Control Cluster

The Parameter Adjustment Control cluster is located in the center of the IconMaster hardware control panel. It consists of two scroll knobs and four LCD buttons. Use this cluster to adjust parameters within the IconMaster system. The upper level menu items are displayed on the LCD buttons furthest to the left. The left scroll knob is used to navigate through the menu items. The display buttons that are to the right indicate the parameter name on top with the parameter value or option below. The right scroll knob is used in conjunction with the menu selections to change the parameter values and option.

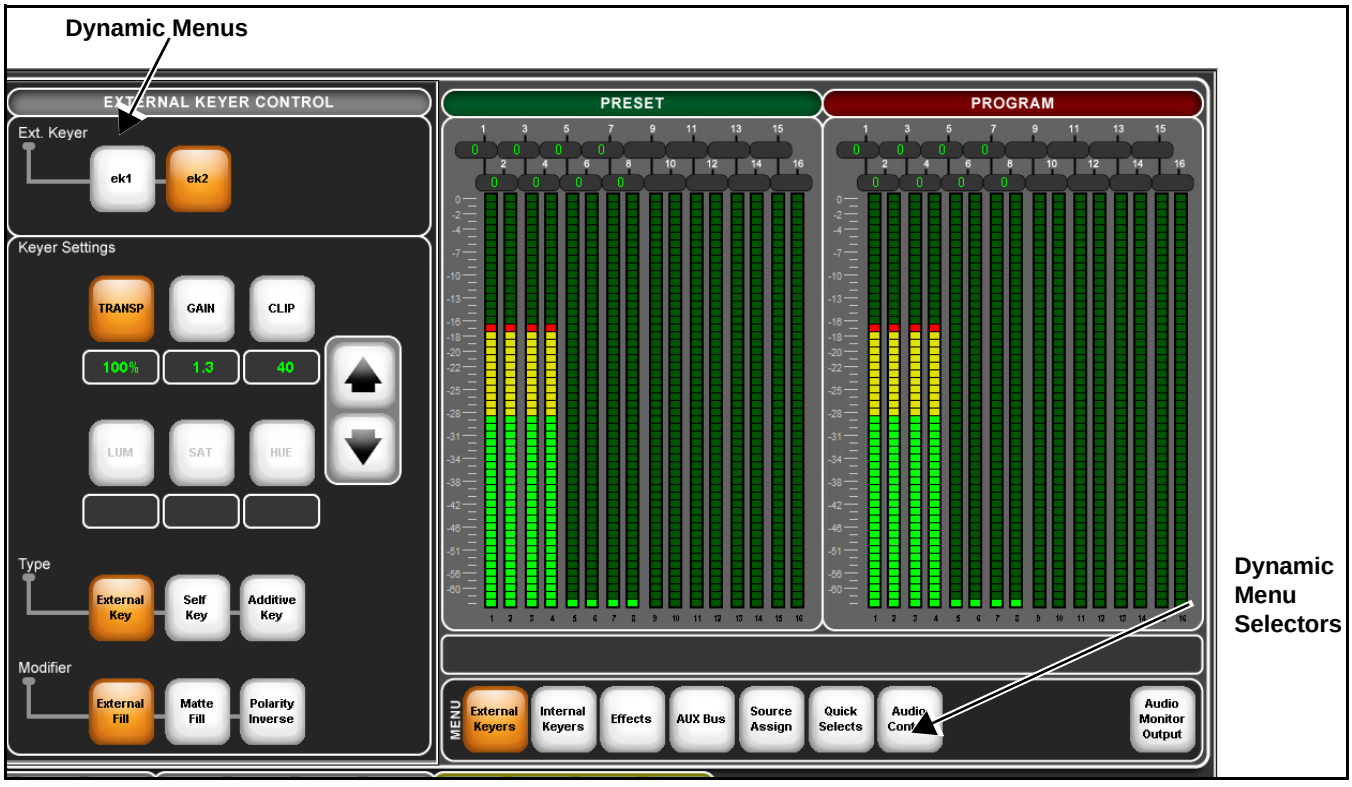


Figure 1-10. Dynamic Menus on the Software Control Panel

On the IconMaster software control panel, these same functions are handled within the dynamic menus, which are selected using the Dynamic Menu Selector buttons.

Upper Level Menus

Table 1-3. Upper Level Menus

Menu	Function	For Parameters See...
SrcSEL	Source select for dynamic inputs control	page 27
KEYER	Keyer Control	page 53
TRANS	Transition Control	page 66
AUDIO	Audio Control	page 93
FX	Effects Control	page 75
SEL	Quick Selects	page 48

At any time, you can return to the previous menu by pressing the LCD button that is furthest to the left, or you can enter the highlighted menu by pressing the left scroll knob.

Fast Reset Function

These buttons are used whenever the Fast Reset function is enabled. The Fast Reset function is available for selected **PST** or **PGM** source audio gains, selected PST or PGM source audio PROC settings, audio over gains and Audio Over PROC settings, internal and external keyer settings, and audio gains with the optional CP2 audio control panel. In Fast Reset mode, there are three separate operations that are enabled: **SET**, **CLEAR**, and **RECALL**. These operations are discussed in detail in Chapter 3 and Chapter 5.

The Fast Reset function will not restore original position values to logos that have been assigned new horizontal and vertical values through the **POSN** parameter. Fast reset will not affect Logo Audio “audio over” mix ratios. teh Fast Reset function, when used on an audio over, will reset the audio over mix ratio to 50/50.

Panel Lock

On the hardware control panel, press and hold LCDs 1 and 4 whenever the panel needs to be physically locked, so as to prevent accidental button presses. Status indicators will continue to provide you with on-air selection and tally indications, while maintaining a protected panel state. For more information about locking and unlocking panels, see page 206.

On the software control panel, a dedicated Panel Lock button appears below the Channel Management buttons, as shown in Figure 1-11.

Primary/Secondary Channel Assignment and Control

A single primary channel and up to seven secondary channels can be selected to follow each other from a single operator panel.

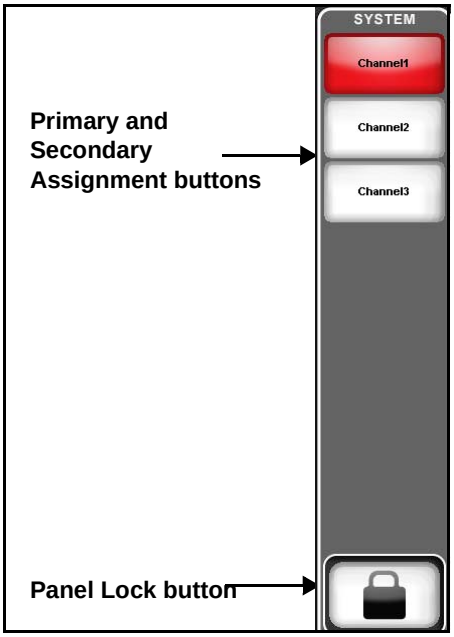


Figure 1-11. Channel Assignment and Panel Lock Buttons on ISCP

In addition, IconMaster can automatically synchronize all selected secondary channels to the primary channel. For more information about channel assignment and control, see page 206.

Service Menu

You can access the Service menu through the Parameter Adjustment Control cluster. The Service menu makes it possible to verify the version of the control panel software being used, change the IP Address of the control panel, and check the operation of the fader bar. For more information about navigating the Service Menu, see your *IconMaster Hardware Installation and Configuration Manual*.

Optional Audio Control Panel

The hardware audio control panel (Figure 1-12) provides quick audio gain control, program preset, monitor output, and audio-overs. The audio controls can be viewed in terms of channels, AES, and clusters (groupings of similar audio channels).

Figure 1-12. Hardware Audio Control Panel

The software audio control panel is accessed using the Dynamic Controls, and is shown in Figure 1-13.

Figure 1-13. Software Control Panel Audio Controls

See page 83 for information on how to operate the audio control panel.

Software Tools

Optional software tools are available for use with IconMaster. These are described in the following sections:

- “IconMaster Software Control Panel (ISCP)” on page 17

- “ISCP-Lite” on page 17
- “CCS Navigator™” on page 17
- “RouterMapper™” on page 18

Your IconMaster system comes with a set of software tools collectively labeled Icon Series Soft Tools. The Icon Series Soft Tools CD contents are described in the following sections:

- “IconMaster Configuration Utility (ICU)” on page 16
- “Content Editor” on page 16
- “LogoCreator” on page 16
- “IconLogo Soft Panel” on page 17

The IconMaster incorporates an IconLogo graphics engine to offer a complete master control solution with embedded branding. The branding engine allows for static logos, animations, clocks, and crawls under the transition control of IconMaster.

You can preview logos on the PST output and adjust their positions before taking them to air. You can attach audio WAV files to logos (only available on MGI-3902/MGI-3903).

Animations are set to automatically run on a take transition from the IconMaster. Logo selection from the IconMaster panel is through the Logo menu available on **Keys 3** through **6**.

IconMaster Configuration Utility (ICU)

Use the IconMaster configuration utility software application to configure the IconMaster hardware system. It allows you to control configuration of input/output functions; audio, effects, and transitions; system components; and panel components through on-screen menu selections.

See Chapter 9 for more information.

Content Editor

The Content Editor supplies both static and dynamic data for crawls. See Appendix F: “Content Editor Software Application” for more information.

LogoCreator

The LogoCreator application makes it possible for you to create static and animated logos offline. This is the recommended process for logo creation, as logos are pre-rendered and require less time to load. Logos can be loaded directly into both the near-line and on-line storage, ready for use with the IconMaster keys. See Appendix E: “LogoCreator Software Application” for more information.

IconLogo Soft Panel

The soft panel allows for logo management, creation, and parametric changes. Logos can be viewed and selected to layers using the soft panel, but direct transitions are NOT allowed from the IconLogo panel. Transitions of logos are accomplished using **Key 3** through **6** selections on the IconMaster. If a key layer is on-air, any changes made to that layer are applied instantly.

Some changes that are done in the Iconlogo soft panel will be prohibited by the soft panel, if the logo is on air at the time the changes are made.

This tool is also used to configfure logo audio.

See Appendix D: “IconLogo SoftPanel Software Application” for more information.

Note

Optionally, you can use the IconLogo hardware panel (purchased separately), which offers the same functionality as the soft panel.

IconMaster Software Control Panel (ISCP)

This control panel is configured within CCS Navigator, and is intended to be used with a touch screen monitor. It contains all of the functionality of the IconMaster Hardware control panel with the exception of a fader bar.

See “Configuring IconMaster Software Control Panel” on page 107 for more information.

ISCP-Lite

This reduced-complexity software control panel is configured with in CCS Navigator, and is intended to be used with a touch-screen monitor in conjunction with an IconMaster Hardware Remote Control Panel. It contains the functionality for parametric control of the IconMaster, but does not have the source control and channel management functionality of IconMaster Software Control Panel. The ISCP-LITE is not designed for stand-alone operation, and must be physically and logically paired with an IconMaster Hardware Remote Control Panel.

CCS Navigator™

CCS Navigator is a Windows®-based[1] software application that allows you to easily create GUIs that visually represent operational environments.A trial version of Navigator is included on the IconMaster CD; or, you can download a trial version of Navigator from our Web site. A PDF version of the Navigator manual is available on the IconMaster CD. You can purchase a separate, hard-copy version of the manual; please contact your Harris Sales representative for more information.

[1] “Windows” is a registered trademark of Microsoft Corporation in the United States and other countries.

RouterMapper™

RouterMapper is a Windows-based application that allows you to program Harris router frames and control panels. RouterMapper is included on the IconMaster CD; or, you can download a copy from our Web site. A PDF version of the RouterMapper manual is available on the IconMaster CD. You can purchase a separate, hard-copy version of the manual; please contact your Harris Sales representative for more information.

Chapter 2

Inputs and Outputs

Overview

This chapter explains the basic inputs and outputs available for an IconMaster system.

This chapter covers the following topics:

- “Primary Control Bus Cluster” on page 20
- “Selecting a New Input Source” on page 23
- “Changing Input Sources (Dynamic Inputs)” on page 27
- “Making PST or PGM Bus Source Selections” on page 23
- “Making Aux Bus Source Selections” on page 25
- “Previewing Input Sources” on page 27
- “Taking Selections On-Air” on page 29

This chapter presupposes that you are familiar with the layout of an IconMaster control panel. If you are not, please refer to Chapter 1: “Introduction” for more information.

Primary Control Bus Cluster

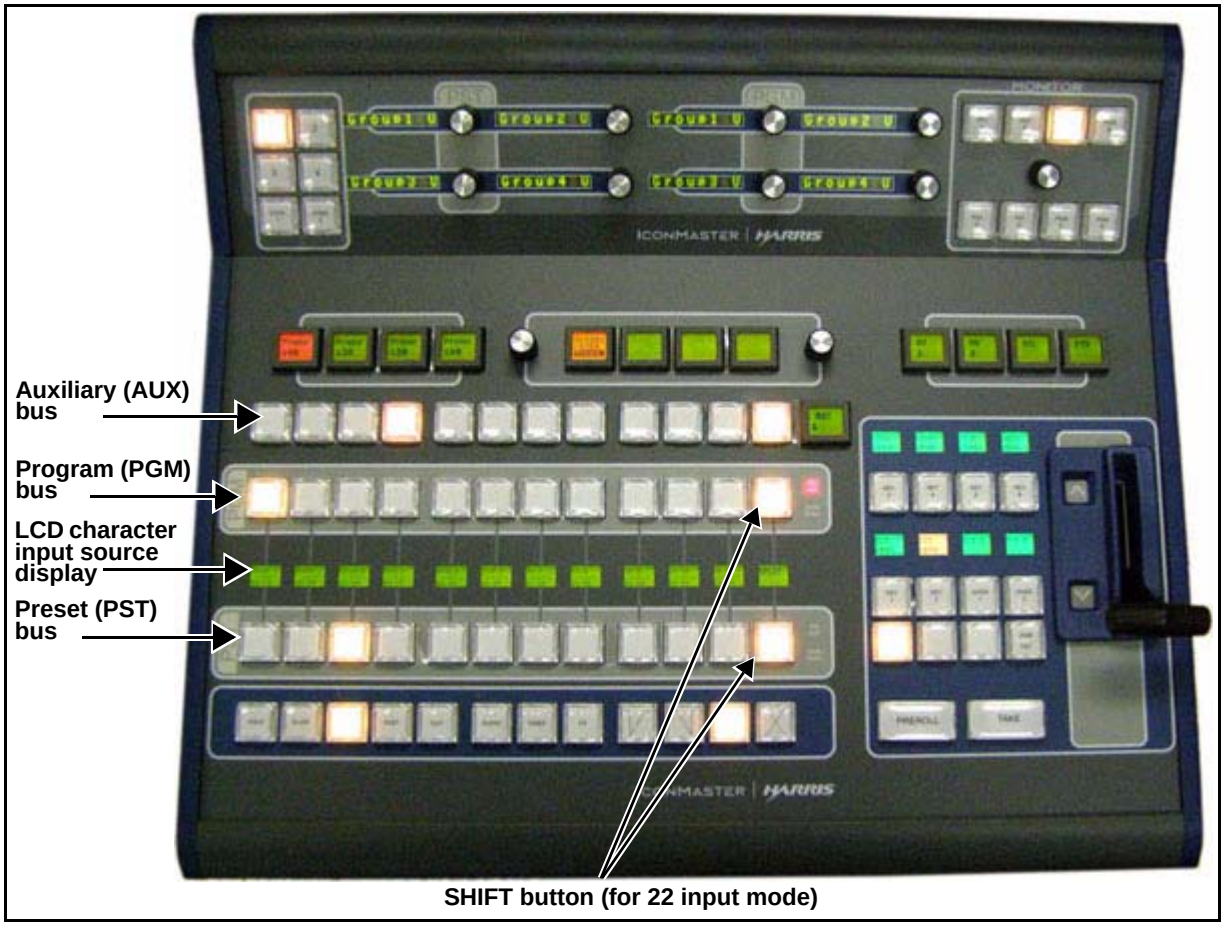


Figure 2-1. Primary Bus Locations on Hardware Control Panel

At the center of the main control panel, there are 3 primary buses: Aux, Preset (PST), and Program (PGM); and LCD character input source display windows.

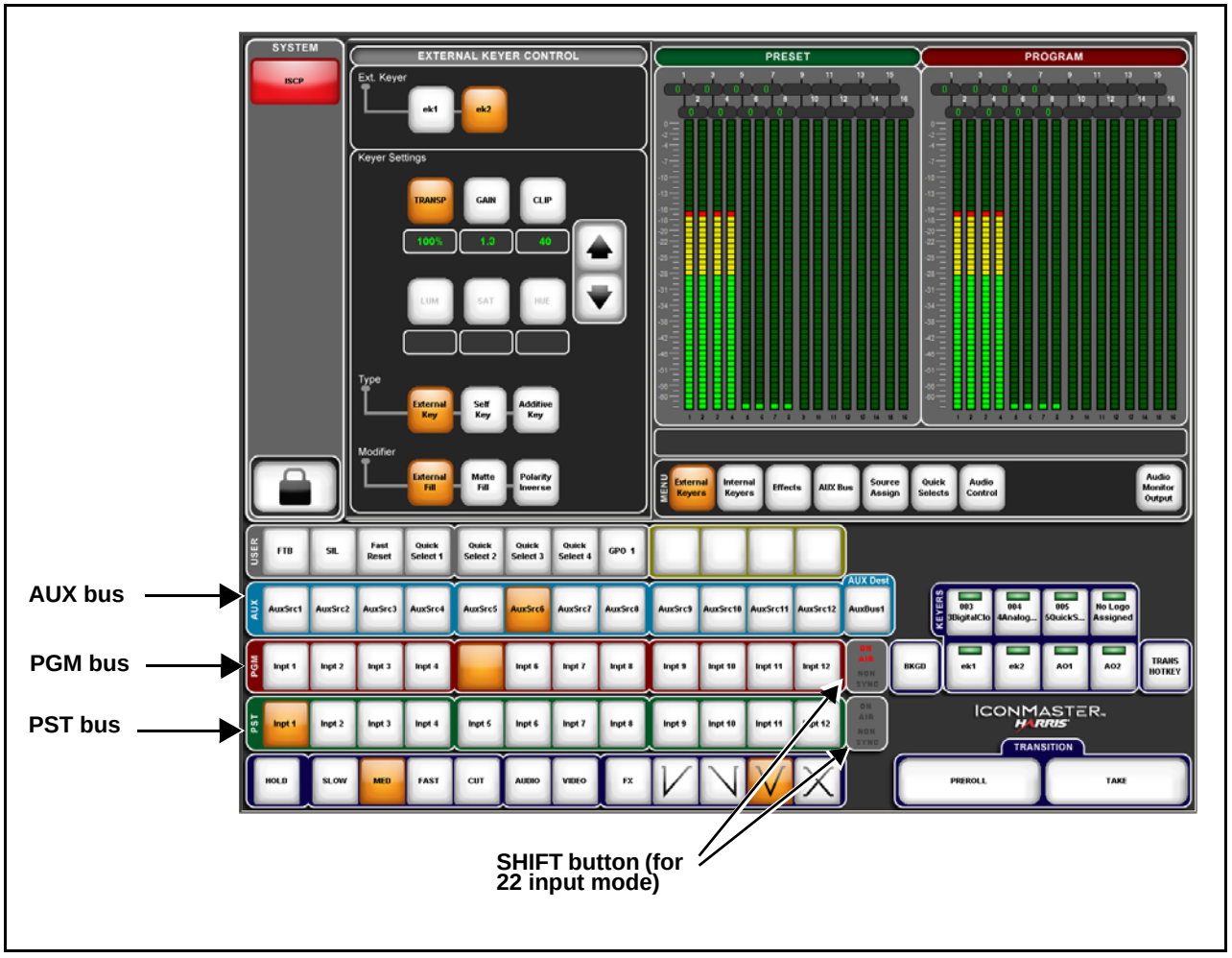


Figure 2-2. IconMaster Software Control Panel

Aux Bus

The **Aux** bus is typically used to switch external effect backgrounds, external key/fills, and external audio routers.

Note

You can assign input sources to the Aux buses using the ICU Auxiliary Bus Configuration dialog box. See page 153 for instructions.

The Aux bus holds up to 12 different input sources. Each of the 12 Aux buses can be considered to be a 12×6 router, which allows a single aux button press to switch up to 6 simultaneous inputs to 6 destinations on multiple router levels. With 12 aux buses and 12 buttons per bus, each button can address up to 6 independent router levels. In addition, the Aux bus allows you to perform such tasks as

- Manage effects backgrounds (effects background input)
- Monitor other sources such as VTRs and servers
- Control a secondary router connected to the primary router
- Manage video or (video with embedded audio) external backgrounds
- Manage audio through an audio router
- Manage additional key fields

Preset (PST) Bus

The **PST** bus is typically used to select a video and/or audio input that will be placed on-air during the next transition. It displays what will go on air. Its sources are connected to the IconMaster through a router. When you perform a transition, the content that was displayed on the PST bus goes on air, and the content that was on the PGM bus goes to the PST bus.

The PST bus can be set to use 12[1] or 22[1] sources. These sources are assigned through the ICU.

Program (PGM) Bus

The **PGM** bus displays what is currently on-air. Its sources are connected to the IconMaster through a router. It is typically used as an on-air bus for output signals of video and audio. When you perform a transition, the content that was displayed on the PST bus goes on air, and the content that was on the PGM bus goes to the PST bus.

The PGM bus can be set to use 12 or 22 sources. These sources are assigned through the ICU.

LCD Input Source Displays

The PST and PGM buses share 12 LCD character input source display windows (located between the PGM bus and PST bus). On hardware control panels, the display windows show the name of the source currently assigned to each of the inputs. These names are unique to your particular environment. On software control panels, the button names themselves change.

You can change source display names and 12- or 22-input mode using the ICU System Configuration dialog box. See page 184 for instructions.

[1] In 22 input mode, the last source select pushbutton on the PGM and PST buses acts as a shift between two banks of 11 inputs (1-11 and 12-22). In 12 input mode, only 12 inputs are available on the 12 PGM and PST source select buttons.

You can have 12 or 22 input sources displayed, depending on the number of sources configured for IconMaster use from your router. If 22 input sources are configured, the last pushbutton on the PGM and PST buses will function as a Shift key. In 22 input mode, the LCD display windows will be split, with the upper text showing the source on the PGM bus and the lower text showing the source on the PST bus. (See Figure 2-3 on page 23). The Shift button on each particular bus operates on that bus only and does not control the other bus; that is, the Shift button on the PST bus controls pushbuttons on the PST bus only and the Shift button on the PGM bus controls pushbuttons on the PGM bus only.

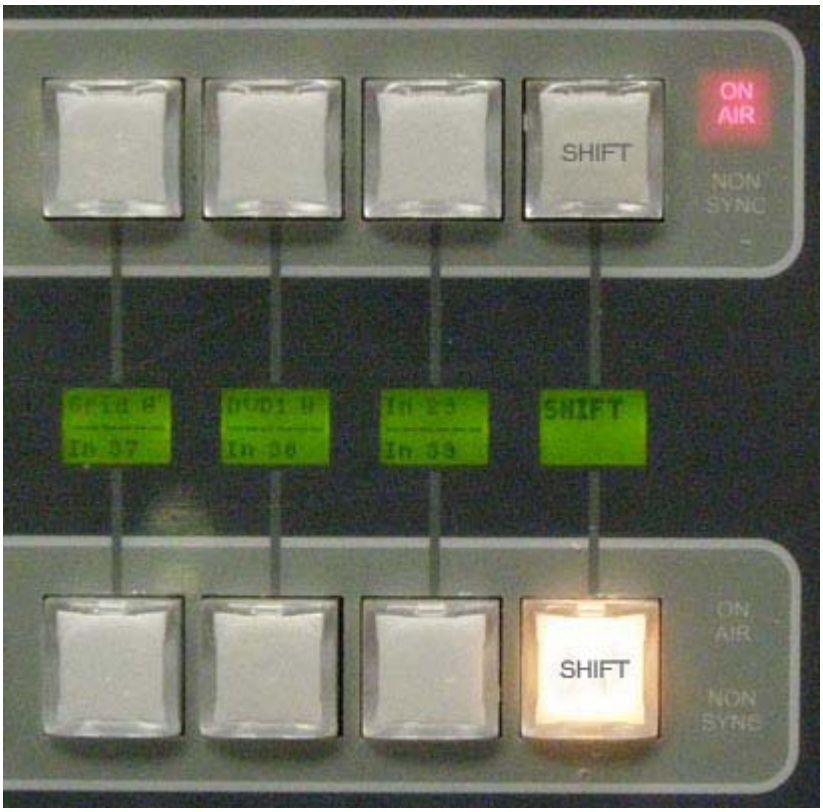


Figure 2-3. LCD Display for 22 Input Sources (22 Input Mode)

Selecting a New Input Source

Making PST or PGM Bus Source Selections

Inputs are assigned to the PGM and PST bus buttons (through the ICU) as a static input or as a dynamic input.

The process for selecting a new input source is the same for each of the primary buses: on the selected bus, press the button that corresponds to the input. (Remember that the LCD display windows show the name of the source currently assigned to each of the inputs.) The button tally will illuminate to confirm the selection.

IconMaster assumes it has exclusive control of the primary router's outputs, which feed the IconMaster's A and B bus inputs. In the event that IconMaster cannot control these primary router outputs and the source currently routed to the PST or PGM bus may be incorrect, the button tally lamp flashes, indicating the source is not confirmed to be selected. This feature will timeout (declare a request unanswered) after one second.

If a source button tally lamp flashes, check the primary router and/or router communications.

Dynamic inputs are only available if the IconMaster is set up for router database mode. See page 153 for more information.

Note

You can configure this control through the ICU Primary Inputs dialog box. See page 145 for instructions.

Selecting 22 Input Mode

IconMaster supports up to 22 directly accessible sources in a function called “22 input mode.” In 22 input mode, the last button in the PGM bus bank acts as a shift button. which allows you to shift from one bank of 12 inputs to two banks of 11 inputs: 1-11 and 12-22. The 22 input mode LCD display between PST and PGM buses splits, with the upper text showing the source on the PGM bus and the lower text showing the source on the PST bus. (See Figure 2-3 on page 23.) Pressing the Shift button toggles the LCD display text, so you know which source is currently selected. One source is always selected on the PST and PGM buses.

If a source is showing on the PST or PGM bus, and the Shift button is pressed to change banks, buttons 1 thru 11 will not be illuminated. If you see just the Shift button pressed, simply press it again to toggle to the other bank. A source button will now be seen illuminated.

You can set up this function through the ICU System Configuration dialog box. See page 184 for instructions.

Program Bus “Hot” Punch Operation

Selections on the PGM bus automatically perform a PGM bus cut (or “hot” punch) operation; that is, if you press a PGM bus source button, the selected source goes immediately on air. The PST bus is used in this operation, but will return to its original source after the action is performed, and the Preset output of the switcher momentarily shows the selection of the PGM input. Operationally, no feedback is shown to the end user and the action taken is transparent to the operator.

This function is not the same as the Transition Hot Key pushbutton in the Transition Control cluster. See page 42 for a discussion of the Transition Hot Key operation.

Note

"Hot punch" can cause effects, AO, and keyers to be dropped from the PGM bus, depending on how it is configured in the ICU.

Making Aux Bus Source Selections

Use the **Aux** button to assign control of any preconfigured Auxiliary buses. You can configure up to 12 different buses, with 12 selections on each bus. For best results, unused buses are recommended to be disabled.

To use an Aux bus, press the **Aux** button until you reach the bus you want (Aux 1, Aux 2, Aux 3...Aux 12), and then press the button that corresponds to the appropriate input.

Note

You can configure this control through the ICU Aux Bus dialog box. See page 153 for instructions.

The Aux bus buttons operate in the same way as a router control panel: pressing a source button will extinguish the tally light on the source button previously selected, and will illuminate only once the router has acknowledged the change. If the selected Aux source button does not illuminate, the router has not acknowledged the change. It is likely the router Aux destination being controlled is locked or protected, or a router communications error has occurred.

This feature will timeout (declare a request unanswered) after one second. If routing is done over a serial port, Router Feedback is disabled for MKE revisions A, B and C. For MKE revision D, it is automatically on. For routing over Ethernet, it is on all the time, and cannot be disabled.

Note

If an Aux Bus button is programmed to switch multiple Source/ Destinations, only the left-most Source/Destination is monitored.

Configuring the Aux Bus on a Software Control Panel

When you press **Auxiliary Bus Select** under Dynamic Page Controls, the following sub-panel appears:

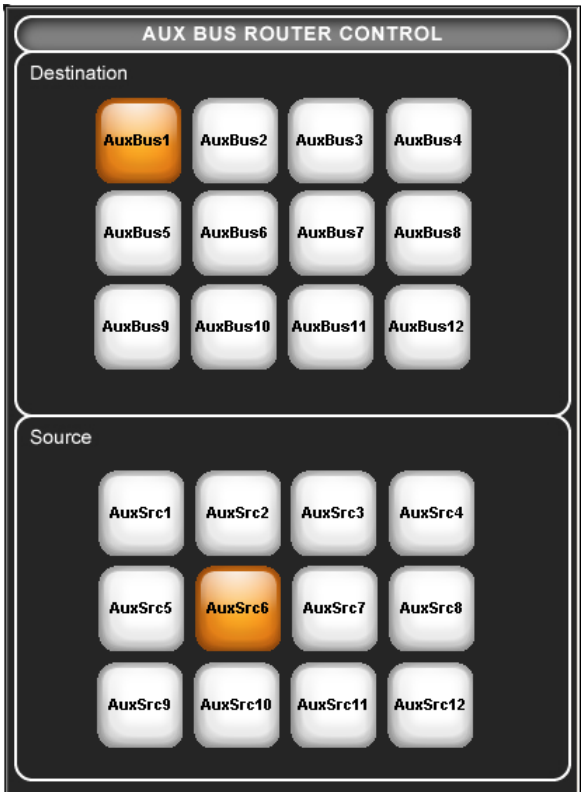


Figure 2-4. Auxiliary Bus Select Sub-Panel

Aux bus selections that are made on a hardware panel will affect the data that appears on this page.

This sub-panel routes Sources to Destinations, as on the Auxiliary bus of the IconMaster master control switcher. Initially it displays the last selected Destination and the Source that is currently taken to that Destination.

To route a source to a destination:

1. Press one of the **Destination** buttons (**Aux 1** to **Aux 12**).

   A **Source** button lights up to update to indicate the source that is currently routed to that destination (if any).

2. Press one of the **Source** buttons (**Src 1** to **Src 12**) to route a different Source to the selected Destination.

Only one Source and one Destination at a time can be selected.

Sources and Destinations are defined using IconMaster Configuration Utility software. See the section “Auxiliary Bus Configuration Dialog Box” in your *IconMaster Master Control Switcher Configuration Utility Software Reference Manual* for more information.

Previewing Input Sources

You can preview your input sources on a preset monitor. A program monitor will display what is on air.

Note

If you do not have a preset monitor for each video input, you will see the new picture only when it is on the air.

Changing Input Sources (Dynamic Inputs)

You can change router input sources through a procedure called “dynamic inputs.” Use the Dynamic input functionality to change the router selection for an IconMaster source button. This feature is works in both 12- or 22-input mode. Dynamic inputs are only available if a router database has been downloaded and configured on the IconMaster.

This function is enabled through the ICU Primary Inputs dialog box. See page 145 for instructions.

Each IconMaster source is set up to be either static or dynamic.

- A **static** source is not changeable at the control panel; it can only be changed through the ICU. This selection is appropriate for sources that will always be needed.
- A **dynamic** source has its initial router source defined in ICU, but can be changed at any time at the control panel.

If the selected PST is the same as the current on air PGM source, PST dynamic selection is blocked.

An IconMaster control panel can have any mix of static and dynamic inputs.

Source Select on a Hardware Control Panel

When a source is selected on the PST bus, on a hardware control panel the Parameter Adjustment Control cluster will jump to the router assignment screens.

Figure 2-5. Parameter Adjustment Display for Dynamic Inputs

- LCD # 2 will display the PST input number and the source currently assigned.

- If the source is dynamic, LCD # 3 will display router categories and LCD # 4 will display the indexes. (A source displayed on the PGM bus cannot be changed, even if it has been set up to be a dynamic source.)

To change a dynamic input source:

1. Select the PST bus source to change or, using the left Parameter Adjustment Control knob, scroll to the **SrcSEL** menu selection, and then press the left control knob to accept the selection.
2. Highlight the parameter to change by pressing LCD #1, #2, #3, or #4; and then, using the right Parameter Adjustment Control knob, scroll to the input source selection.
3. Press the right Parameter Adjustment Control knob to accept the source.

You can scroll and press, scroll and press, to see all of the sources.(One category is shown as <ALL>, which turns the index LCD into a list of all possible router sources.

Source Select on a Software Control Panel

On the ISCP, when you press **Source Select** under Dynamic Page Controls, the following sub-panel appears:

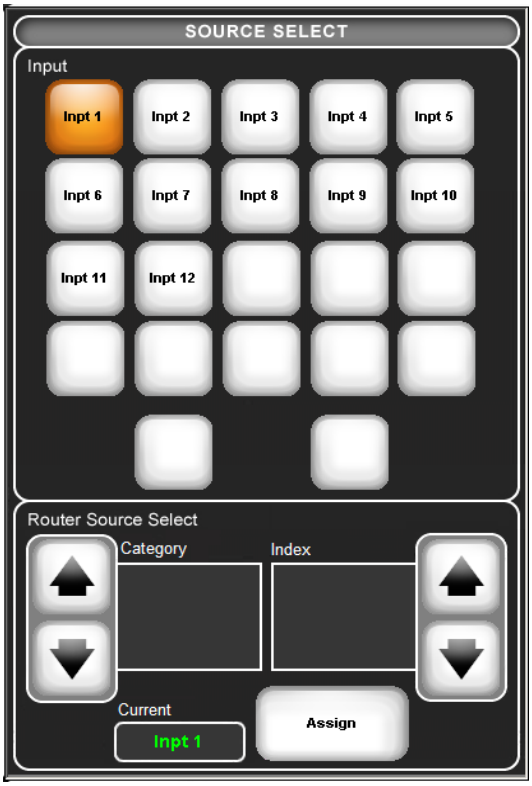


Figure 2-6. Dynamic Routing Sub-Panel

Settings made on this page are only valid and usable if IconMaster is configured to run with Router Database Mode enabled.

Each button in the Dynamic Routing section of the screen displays a source name, as defined by RouterMapper when you created the routing panel.

Each IconMaster source is set up to be either static or dynamic.

- A **static** source is not changeable at the control panel; it can only be changed through the ICU. This selection is appropriate for sources that will always be needed.
- A **dynamic** source has its initial router source defined in ICU, but can be changed at any time at the control panel.

An IconMaster control panel can have any mix of static and dynamic inputs.

When a source is selected on the PST bus, the Parameter Adjustment Control cluster will jump to the router assignment screens.

To reassign the sources that connect to the Program and Preview inputs on the switcher:

1. Press an **Input** button.

   The **Current** field indicates the Source curently taken to that input.

2. Press the **Up** and **Down** buttons beside **Category** to scroll through the list of available categories.

   The currently selected category is green.

3. Press the **Up** and **Down** buttons beside **Index** to scroll through the list of available indexes that are in that category.
4. Press **Assign** to set the currently selected source to the selected Input.

The **Current** field updates to the selected.

Taking Selections On-Air

Taking a selection on- or off-air is part of the transition process. Depending on the selection's transition type (background, key, or audio-over), press the appropriate transition control button. This will set up a transition from the PST to the PGM bus. Then, press **Take** to take the selection on-air.

See "Triggering Transitions" on page 45 for detailed instructions on this process.

Chapter 3

Transitions

Overview

This chapter explains the use of the transitions controls on an Iconmaster control panel. This chapter covers the following topics:

- “Introduction: Transitions” on page 32
- “Performing Successful Transitions” on page 35
- “Quick Selects” on page 47
- “Adjusting Parameters with the Control Cluster” on page 53

This chapter presupposes that you are familiar with the layout of an IconMaster control panel. If you are not, please refer to Chapter 1: “Introduction” for more information.

Introduction: Transitions

A *transition* is a change from one picture and/or audio program output to another. With the Iconmaster, there are four types of transitions you can perform: background transitions, key transitions, audio-over transitions, and effects transitions. (Effects transitions are discussed in Chapter 4.)

On the IconMaster, transitions are performed through the Transition Functions button cluster and the Transition Control buttons cluster. Using the IconMaster configuration utility software, you can choose from a list of available functions to redefine these buttons. In this way, you can customize the operation of the panel for optimum ease of use.

On a hardware control panel, you may also adjust transition control parameters within the IconMaster system through the Parameter Adjustment Control cluster.

Figure 3-1. Transition Function and Control Buttons

On a softare control panel, the equivalent tools and functions can be found in the Dynamic Menus.

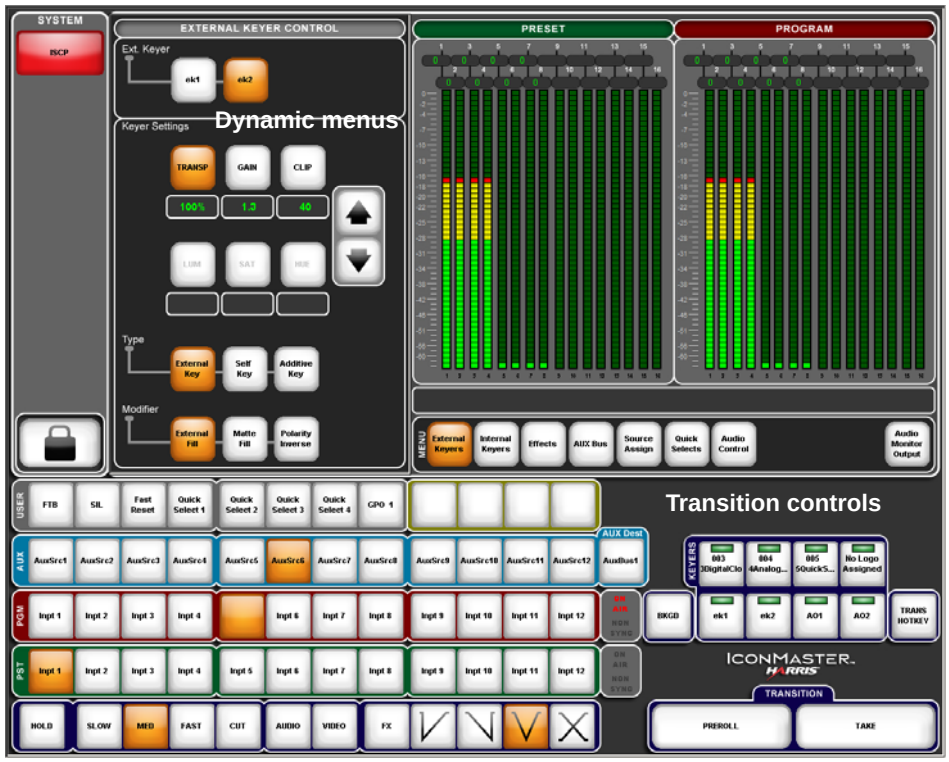


Figure 3-2. Transition Function and Control Buttons

Configurable Transition Functions

The Transition Functions cluster controls the selection of transition type and rate that will occur upon activation of the next transition.

Transition Function operations include the following:

- **Stopping Response to Automation Commands**: This operation is controlled through the **Hold** button. See page 37 for more information.
- **Selecting Transition Rates**: This operation is controlled by the **Slow**, **Med**, **Fast**, and **Cut** buttons. See page 37 for more information.
- **Selecting an Effects Transition**: This operation is controlled by the **FX** button. See page 38 for more information.
- **Selecting Transition Types**: This operation is controlled by the **Cut-Fade**, **Fade-Cut**, **V-Fade**, and **Cross-Fade** buttons. See page 38 for more information.
- **Setting Up Breakaways**: This operation is controlled by the **Audio** and **Video** breakaway buttons. See page 79 for more information.

Transition Control

Background, key, and audio over transitions are controlled through the Transition Control cluster. The Transition Control cluster contains the buttons that determine the state of the program output upon execution of a transition.

Transition Control operations include the following:

- **Enabling a Key Transition**: This operation is controlled through keys 1 and 2 (external keys) and keys 3 through 6 (internal keys), and corresponding LCD display windows. See page 40 for more information.
- **Enabling a Background (Preset to Program) Transition**: This operation is controlled through the BKGD button. See page 40 for more information.
- **Enabling an Audio-Over Transition**: This operation is controlled through the Audio-over buttons. See page 42 for more information.
- **Triggering Transitions**: This operation is controlled through the Preroll button, the Take button, and the fader bar (on the hardware control panel only). See page 46 for more information.
- **Transition Hotkey**: Provides quick access to turn keyers on and off, without selecting the transition enable buttons and using the **TAKE** process. See page 42 for more information.

Parameter Adjustment

The Parameter Adjustment Control cluster allows you to adjust transition control parameters within the IconMaster system. Upper level menu items are displayed on the LCD buttons. Scroll knobs are used to navigate through the menu items.

Parameter Adjustment operations include the following. (Certain parameter adjustment operations may be described in greater detail in other sections of the manual.)

- **Adjusting External Keyer Control Parameters**: This operation makes it possible to adjust the parameters of each key separately. See page 53 for more information.
- **Adjusting the Transition Rate**: This operation makes it possible to select a different transition rate. See page 66 for more information.
- **Adjusting Effects Control Parameters**: This operation makes it possible to select an effect previously created in the IconMaster configuration utility software. See page 75 for more information.

Performing Successful Transitions

To perform a transition:

1. Select the content.

   You select content sources through the BKGD button and a PST bus source and, optionally through one or more of the key buttons or audio over buttons.

2. Determine whether the transition will be a background transition, effect transition, key transition, or audio-over transition, alone or in combination.

   See “Determining Transition Types” on page 36 for more information.

3. Select a transition type.

   Transition types are described in “Selecting Transition Types” on page 38. The location of the Transition types buttons is shown in Figure 3-3.

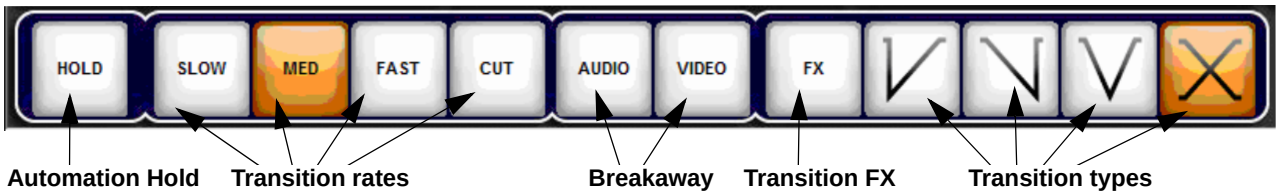


Figure 3-3. Configurable Transition Functions

4. Select a transition rate.

   Transition rates are described in “Selecting Transition Rates” on page 37. The location of the Transition rate buttons is shown in Figure 3-3.

5. Select the elements that will be included in the transition.

   One background and eight keyer enable buttons are used to enable which source(s) will be included in the next transition. Pressing these buttons will toggle the button on and off. Any source that is illuminated will be included in the next transition. Sources that are not illuminated will not be included in the next transition. See “Enabling Elements of a Transition” on page 39 for more information.

6. Trigger the transition.

   This is most simply done by pressing the **Take** button, but you can also press the **Preroll** button or use the fader bar (on the hardware control panel only). See “Triggering Transitions” on page 45 for more information.

Determining Transition Types

The buttons in the Transition Functions cluster (Figure 3-4 on page 36) determine the type of transition (if any) that will occur.

- A **background transition** is a change in video and/or audio source selection that forms a background scene into which a key or audio-over may be inserted.
- An **effect transition** includes one selected effect, which will include at least one effects segment, up to 4 in total.
- A **key transition**, which may include logo audio over, is used to turn on or off one or more available keyers.
- An **audio-over transition** is used to mix in an audio signal using one or both of the available audio-over buttons.

Figure 3-4. Transition Control Cluster

Selecting Transition Functions

The Transition Functions cluster (located on the bottom row of the control panel to the left of the Transition Control cluster) allows the selection of type and rate of a transition that is to occur upon activation of the next transition.

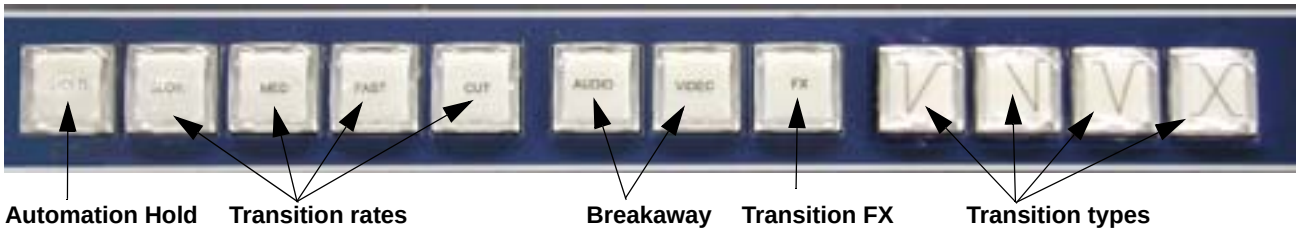


Figure 3-5. Configurable Transition Functions

Note

You can configure this control through the ICU Primary Input dialog box. See page 145 for instructions.

Stopping Response to Automation Commands

Press the **Hold** button to stop the switcher from responding to Automation commands. (See Chapter 6: “Automation” for more information.)

Selecting Transition Rates

The transition rate buttons allow you to set a transition’s duration to a prespecified number of frames for the different transition types (cross-fade, V-fade, cut-fade, fade-cut). You can choose among Slow, Medium, Fast, and Cut transitions. (You can remove some transition rates from the display by using the IconMaster Configuration Utility to define panel buttons. See page 198 for more information).

One of the transition rate buttons is always active, so the current selection will be illuminated.

Note

If an automation system changes the transiton rate, and the new rate does not match a known rate, the rate buttons go out.

To select a different transition rate, press the appropriate transition rate button that corresponds to that duration. Whenever you select a new transition rate, the previous selection is cancelled, the previous selection’s button tally is extinguished, and the new selection’s button tally is illuminated. In addition, the control cluster display will show the selected button’s rate setting.

Note

You can configure this control through the ICU Transition dialog box. See page 157 for instructions.

Selecting Transition Types

The transition type buttons allow you to select certain transition types (cut-fade, fade-cut, V-fade, or cross-fade). To select a different transition type, press the appropriate transition type button that corresponds to that type. Whenever you press a new transition type button, the previous selection is cancelled (if no breakaways are assigned), the previous selection's button tally is extinguished, and the new selection's button tally is illuminated.

Cut-Fade

Cuts the program off air, and then fades the preset up

Fade-Cut

Fades the program down, and then, when the program is off air, cuts the preset up

V-Fade

Fades the program down, and then, when the program is off air, fades the preset up

Cross-Fade

Fades the program down and at the same time fades the preset up

Figure 3-6. Transition Types

Note

You can configure this control through the ICU Transition dialog box. page 157 for instructions.

Selecting an Effects Transition

If the **FX** button is selected, the **FX** button will illuminate, and the Parameter Adjustment Control cluster display will show the currently selected effect.

To scroll through the preconfigured effects, repeatedly press the **FX** button. The effects are displayed in the Parameter Adjustment Control cluster (Figure 3-7) of the hardware control panel, or the Dynamic Menus section of the software control panel (Figure 3-8).

Figure 3-7. Effects Displayed in the Parameter Adjustment Control Cluster of the Hardware Control Panel

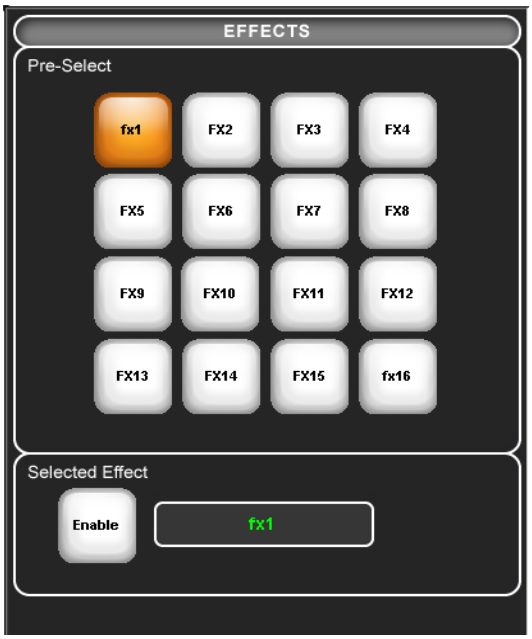


Figure 3-8. Effects Sub-Panel of the Software Control Panel

Once an effect is selected, press the **Take** button to begin the transition.

Enabling Elements of a Transition

This section describes the method used to select what elements will be transitioned on or off the PGM bus during the next transition.

One background and 8 keyer enable buttons are used to enable which source(s) will be included in the next transition. Pressing these buttons will toggle the button on and off.

- When illuminated, the source will be included in the next transition.
- When not illuminated, the source will not be included in the next transition.

The LCD displays above the eight keyers (two keyers in Iconmaster LITE) have backlight colors, which change to indicate the status of the keyers.

- If the LCD backlight is green, the keyer is currently not on-air.
- If the LCD backlight is red, the keyer is currently on-air.
- If the LCD backlight is orange, the keyer source is in error (i.e., non-sync).
- If the LCD backlight is off, the keyer does not recognize the input signal, or the input signal is not present.

The steps below will guide you through performing background and keyer transitions.

Enabling a Background (Preset to Program) Transition

Background transitions are controlled through the **BKGD** button. The **BKGD** button operates like a toggle button, and allows you to enable or disable a selected background transition.

Taking a Background On Air

1. Press the **BKGD** button. The button tally illuminates, indicating that a background transition from the PST bus to the PGM bus will occur when you select **Take** or **Preroll**.
2. Ensure the correct PST source is selected. This source will be shown on the Preset output.
3. Press the **Take** button to cause the next transition to start immediately; or, press the **Preroll** button to cause the next transition to preroll the appropriate play machine.

Disabling a Background Transition

Press the **BKGD** button until the button tally light is off. The background transition will be disabled for the next transition. As a result, the **Program** background source is also displayed on the **Preset** output.

Note

Effects are not available when the **BKGD** button is off.

Enabling a Key Transition

A key makes it possible to cut a “hole” in the program input and replace it with a separate key fill of the same size.

- Keys 1 and 2 are “external” keys; that is, they allow you to key in the video from an external device, such as an external graphics system or character generator, onto the PGM video.
- Keys 3 through 6 are “internal” keys; that is, they allow you to control the IconMaster’s internal IconLogo generator.

Each keyer has an LCD display window. The LCD display window can be programmed to indicate its source ID, and it illuminates red when the keyer is on-air.

The **Fast Reset** function allows a fast reset of keyer settings back to either previously-stored user defined or factory defaults. See page 66 for more information.

The key source and attributes can be set using the Parameter Adjustment Control cluster (see page 53). Transitioning the keys is accomplished using the Transition Control Cluster (see page 45).

Note

You can configure this control through the ICU Keyer dialog box. See page 171 for instructions.

Taking a Key On Air

1. Press a **Key** button. It illuminates, indicating that a keyer transition (from the **Preset** bus to the **Program** bus) will occur when **Take** is selected.
2. If necessary, adjust the keyer parameters using the Parameter Adjustment Control cluster (see page 53).
3. Press **Take**.

   Once the transition is taken, on a hardware control panel the LCD input source display illuminates red (to indicate that the keyer is on-air) and the key button remains illuminated. This means that the keyer selection will once again be included in the next set of transitions.

   On a software control panel, the on-air indicators on the keyers turn red, as in Figure 3-9.

Figure 3-9. On-air Indicators on Software Control Panel

Keeping a Key On Air

If a key is on-air and the keyer's on-air indicator is red, press the **Key** button until the button tally light is off. The key transition will be disabled for the next transition, and the key will remain on-air.

Taking a Key Off Air

1. The keyer LCD (hardware control panel) or on-air indicator (software control panel) will be red, indicating that the keyer is currently on air.
2. Press the **Key** button until the button tally is illuminated.
3. Press **Take**. The LCD display will turn green and the key button will stay illuminated.
4. To keep the key off air, press the **Key** button to turn off its tally light.

Using the Transition “HotKey”

The hotkey feature provides quick access to turn keyers on and off, without selecting the transition enable buttons and using the **TAKE** process. The **TRANSITION HOTKEY** is located just above the **TAKE** pushbutton in the Transition Control cluster. Pressing a keyer button while the **HOTKEY** button is pressed will immediately transition the keyer on or off air. It will not change the keyer enable state, just the on-air status. The keyer transition type and speed follows whatever transition type and speed are currently selected.

On hardware control panels, press and HOLD the **HotKey** button to hotkey in a BKGD transition, a keyer transition, or an Audio over transition.

On software control panels, you press the trans hot key to activate it. The hot key function will stay active until a button OTHER than the BKGD/Keyers/AO is pressed. As long as TransHotkey is illuminated , any keyer, audio over, or BKGD will be hotkeyed.

Enabling an Audio-Over Transition

An audio-over allows you to reduce the level of the audio on the program channel and mix a separate audio channel on top.

An LCD display window is located above each audio-over button. The display window can be programmed using the ICU to indicate the source ID, and it illuminates red when the audio-over is on-air.

The audio-over source and attributes can be set using the Parameter Adjustment Control cluster (see page 93). Transitioning the audio-over is accomplished using the Transition Control Cluster (see page 66).

You can use the **Fast Reset** function to return Audio Over settings to either a previously-stored user-defined or factory default configuration.

Note

You can configure this control through the ICU Audio Over Matrix dialog box. See page 152 for instructions.

If you have the optional IconMaster audio control panel, it can be used to adjust the audio over mix ratio. See page 77 for more information.

Taking an Audio-Over On Air

1. Press an **A/O** button. It illuminates, indicating that an audio-over transition (from the **Preset** bus to the **Program** bus) will occur when **Take** is selected.
2. Press **Take**. Once the transition is taken, the LCD display illuminates red (to indicate that the audio-over transition is on-air) and the **A/O** button remains illuminated. This means that the keyer selection will once again be included in the next set of transitions.

If an audio over is in progress, and the SIL (fade to silence) function is used, IconMaster audio will turn off, and the Audio Over tally will no longer be red. it will return to an active (red) state when the SIL function is exited.

Keeping an Audio-Over On Air

If an audio-over is on air and the **A/O** button's LCD display is red, press the **A/O** button until the button tally light is off. The audio over transition will be disabled for the next transition, and the key will remain on-air.

Taking an Audio-Over Off Air

1. The A/O LCD will be red, indicating that the audio-over transition is currently on air.
2. Press the **A/O** button until the button tally is illuminated.
3. Press **Take**. The LCD display will turn green and the key button will stay illuminated.
4. To keep the key off air, press the **A/O** button to turn off its tally light.

Changing Audio OverParameters through the Fast Reset Function

The Fast Reset function allows you to quickly reset audio over settings to factory reset values, or to user-saved reset values.

Press and hold the **Fast Reset** button while pressing any of the audio over buttons to reset the audio over settings.

There are three separate operations that are enabled in the Parameter Adjustment Control cluster when the **FAST RESET** button is pressed: **SET**, **CLEAR**, and **RECALL**.

Figure 3-10. Fast Reset Operations

- **SET** Operations: If the **SET** function is enabled, the parameter will not be reset, but its current value will be saved as the source's user-saved reset value. This is the value that will be used during a **RECALL** operation, and will not reset audio mix settings for the logo audio. See "Setting Audio Over Functions" on page 44 for instructions on how to perform this operation. To clear the user-saved values, use the **CLEAR** operation.
- **CLEAR** Operations: If the **CLEAR** function is enabled, the user-saved reset value will be cleared (back to factory value), and the Audio Over parameters will also be reset back to this factory value. See "Clearing Audio Over Functions" on page 44 for instructions on how to perform this operation.

- **RECALL** Operations: If the **RECALL** function is enabled, the user-saved reset value set up through a **SET** operation will be applied. If a reset value has not been set, the factory values will be recalled and applied. See “Recalling Audio Over Functions” on page 44 for instructions on how to perform this operation. The **RECALL** function is the default operation enabled when the **FAST RESET** button is pressed.

Setting Audio Over Functions

1. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.
2. Without releasing the **FAST RESET** button, press the **SET** button. The LCD display button will change from green to orange. Keep the **FAST RESET** button pressed.
3. Press and release the audio over button whose settings you want to save as the user-saved values.
4. Release the **FAST RESET** button.

   The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Recalling Audio Over Functions

1. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.
2. Press and release the audio over button whose settings you want to recall.
3. Release the **FAST RESET** button.

   The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Clearing Audio Over Functions

1. Press and hold the Fast Reset button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.
2. Without releasing the **FAST RESET** button, press the **CLEAR** button. The LCD display button will change from green to orange.
3. Press and release the audio over button whose settings you want to clear back to factory values.

4. Release the **FAST RESET** button.

   The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Triggering Transitions

Transitions can be triggered in several ways, as described in the following sections:

- "Triggering a Transition through the Take Button" on page 45
- "Triggering a Transition through the Preroll Button" on page 45
- "Triggering a Transition through the Fader Bar (Hardware Control Panel Only)" on page 46

Triggering a Transition through the Take Button

Selecting the **Take** button causes the next transition to start immediately. (You set up the transition event that you want the system to perform, and then you press the **Take** button to cause that event to occur.) If none of the transitions (**Int. Key 3-6, Ext. Key 1-2**, **Audio Over 1** or **2**, or **BKGD**) are selected on the control panel, pressing **Take** will have no effect.

Note

You can configure transition function types and rates through the ICU Transition dialog box. See page 157 for instructions.

If a transition is already in progress, pressing **Take** a second time will abort the transition, or take it immediately to the end of its sequence.

Note

You can configure the IconMaster's action when pressing **Take** during a transition through the ICU System Configuration dialog box See page 184 for instructions.

Triggering a Transition through the Preroll Button

The **Preroll** button operates in a way that is similar to the **Take** button, except that it prerolls the appropriate play machine. It allows the IconMaster system to activate an external piece of equipment to perform the event through a predetermined control type.

Note

You can configure this control through the ICU Machine Control dialog box. See page 172 for instructions.

To activate the preroll function, you must enable the Preroll option for the selected input source on the **Preset** bus. Both the preroll machine control type and the preroll duration are set using the IconMaster configuration utility software.

When a source is configured for preroll operation on the control panel, press the **Preroll** button to actuate a machine start and a timer. The timer counts down for the preroll time prior to the transition.

Like the **Take** button, if **Preroll** is pressed a second time during a transition already in progress, the transition is aborted. If the **Preroll** button is selected a second time during a preroll count down period, the transition does not occur.

If the **Take** button is pressed during the preroll countdown period, the transition starts immediately. When the preroll function is assigned to a source selected on the **Preset** bus, the **Preroll** button tally illuminates to red.

Triggering a Transition through the Fader Bar (Hardware Control Panel Only)

The fader bar provides a manual method of performing transitions. The type of the transition (fade-cut, cut-fade, V-fade, cross-fade) is preselected in the Transition cluster of the control panel. The rate of the transition is determined by the speed at which the fader bar is moved. For example, to manually control a cross-fade operation, you select the cross-fade transition, but instead of selecting a transition speed and pressing TAKE, you move the fader bar from one end to the other at any speed you want.

You cannot perform a breakaway or an effect with the fader bar.

Fader bar operations can be stopped mid-stream, or even reversed to the start. The fader bar can be moved back and forth through the transition.

When the fader bar reaches either the top or the bottom end of its travel, the transition is complete, and another transition will begin if the fader is moved again. The fader bar can start transitions from either the top or the bottom position.

LED Indicators

The end stop LEDs are illuminated to indicate the direction of movement required to complete the transition, and may be in one of these possible states: both LEDs off, one LED on, or both LEDs on.

Table 3-1.

Indicator	Description
Both LEDs OFF	Both LEDs will be OFF when the fader bar is positioned fully at either end and there is no manual transition is in progress.
One LED ON	When a manual fader-controlled transition begins, a single LED is illuminated, indicating the direction to move the fader to complete the transition. Thus, a single fader bar direction LED will be ON when a manual fader transition has begun and the fader bar is not positioned fully at either end and the transition is under manual fader bar control (i.e., an auto-transition has not taken over from the manual transition).
Both LEDs ON	If the fader bar is not positioned fully at either end, and no transition is in progress, then both fader bar direction LEDs will be illuminated. This condition can occur if a manual fader bar transition was completed with an auto-transition (TAKE). In this state, movement of the fader bar is ignored until the fader bar is moved to either end, and the LEDs are extinguished. OR You are trying to perform a breakaway or an effect.

Manual Transitions and TAKE Events

If a manual transition is in progress and a TAKE event occurs (either by pressing the **Take** button or through an automation TAKE command), the transition in progress will be cancelled. Both fader LEDs will be illuminated, indicating the fader bar needs to be moved to either end before beginning another manual transition. If an auto-transition TAKE transition is in progress, the manual transition fader bar will be ignored until the auto-transition is complete.

Quick Selects

A quick select allows a complex change in on-air or preview appearance to be recalled in one click or button press. A quick select can contain a preconfigured combination of the background input, transition settings, audio over, and keyer functions. A quick select can be assigned to a pushbutton or parameter selection.

An IconMaster Control Panel can store up to eight quick selects. All eight quick selects will store the look of both the PST and PGM at the time of saving. IconMaster can be programmed to recall either the PST appearance, or the PGM appearance. Each quick select spot (one to eight) can be configured to recall specific aspects of the monitor, including background input, transition settings, audio over, and keyer functions. These settings are made using the IconMaster Configuration Utility. See page 164 for instructions on how to set up quick select options.

Quick selects can be assigned to the Configurable Control cluster LCD buttons on the hardware control panel, and the user assignable buttons on the software control panel. (Refer to Figure 1-1 on page 2 and Figure 1-2 on page 3 or the location of these buttons.) Quick selects can have names assigned through the ICO. (See page 164.) You can assign quick selects to the Configurable Control cluster LCD buttons through the ICU Panel Configuration. See page 198 for instructions.

Navigating the Quick Selects Control

The Quick Select Control allows you to store or recall a combination of functions, including transitions, audio overs, sources, effects, aux buses, and/or keyers.

Note

You can configure this control through the ICU Quick Selects dialog box. See page 164 for instructions.

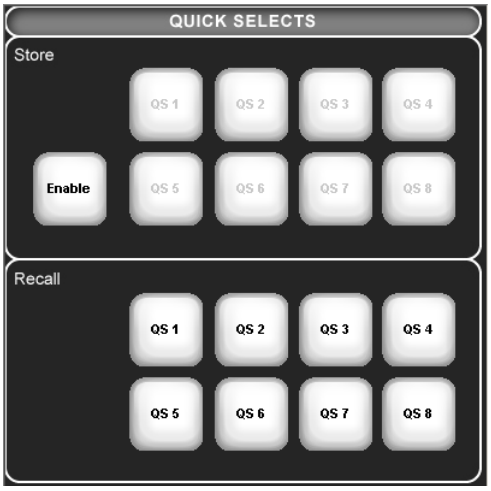


Figure 3-11. Quick Select Dynamic menu (Software Control Panel)

Figure 3-12. Quick Select Parameter Adjustment Control Cluster (Hardware Control Panel)

If you recall a quick select while an effect is in progress, the effect in progress as well as any breakaways are cancelled.

To enter the Quick Select control menu on a hardware control panel:

1. Using the left scroll knob, highlight **Q-SEL** from the upper level menu list in the Parameter Adjustment Control cluster, and then press the left scroll knob to select the transition control.
2. Select either of the following:
   - **CLEAR** removes stored data from a quick select without replacing it.
   - **RECALL** allows a previously set quick select to be recalled.
   - **SET** allows a selected combination of functions to be saved in their current state.

Creating a Quick Select

Depending on the way quick selects have been configured, each quick select will recall the saved look of the PST or PGM monitor. This is a global setting, meaning that all quick selects will save the same monitor's look.

On a hardware control panel, to create a quick select:

1. Select the pushbuttons for preset source, transition types, transition rates, keyers, effects, and audio overs you want for a particular configuration.
2. On the Parameter Adjustment Control cluster, use the left scroll knob to highlight **Q-SEL** from the upper level menu list, and then press the left scroll knob to select the Quick Select parameter.
3. Press the pushbutton labeled **SET** (on the right side of the cluster).
4. Turn the right scroll knob to the number that corresponds to the memory selection number you want.
5. Press the right scroll knob to accept the selection.

Note

There is no visual indication that your setting has been saved.

To create a quick select on a software control panel, press **Enable** in the Store group, then press the Quick Select you want to store to. The IconMaster's settings are saved to that bank in their current state. The corresponding **Recall** button lights briefly to indicate that it has saved information.

Recalling a Quick Select

A quick select will restore the “look” of the PST or PGM monitor, depending on how it was configured. The quick select will restore the appearance onto the PST monitor. This allows a take (manual or Auto Take) to bring that look to the PGM monitor.

On a hardware control panel, to recall a quick select:

1. On the Parameter Adjustment Control cluster, use the left scroll knob to highlight **Q-SEL** from the upper level menu list, and then press the left scroll knob to select the Quick Select parameter.
2. Press the pushbutton labeled **RECALL** (on the right side of the cluster).
3. Turn the right scroll knob to the number that corresponds to the memory selection number you want.
4. Press the right scroll knob to accept the selection.

   The PST monitor(s) will update to reflect the new settings.

To recall a previously created quick select’s settings on a software control panel, press a **Recall** button in the Quick Selects Dynamic menu.

Each quick select can be configured for **Auto Take**. When this option is selected, and the quick select is recalled, the contents of the quick select will appear on the PST monitor briefly, and then a take is triggered directly to the PGM monitor.

Clearing a Quick Select

You may need to delete a quick select from the system memory without over-writing it (so you cannot trigger a quick select at all from that location, for example).

On a hardware control panel, to clear a quick select:

1. On the Parameter Adjustment Control cluster, use the left scroll knob to highlight Q-SEL from the upper level menu list, and then press the left scroll knob to select the Quick Select parameter.
2. Press the pushbutton labeled CLEAR (on the left side of the cluster).
3. Turn the right scroll knob to the number that corresponds to the memory selection number you want.
4. Press the right scroll knob to accept the selection.

   Nothing will happen when any user attempts to recall a quick select in that position.

   On a software control panel, quick selects cannot be cleared.

Quick Selects With Effects

A quick select stores all the PST and PGM data. When you configure a quick select in IconMaster Configuration Utility, you determine the different states you will choose to recall. When you recall a quick select, only the elements selected within the ICU configuration will be applied to the current appearance of the PST or PGM monitor.

Global settings that determine the results of your effect recall include:

- Recall saved PST state or Recall saved PGM State - You must select one or the other. Depending on which is selected, the Control Panel will recall the appearance of the PST or PGM monitor.
- **Allow On Air Change to Keyers** - When this is selected, any keyers that are "on air" on PGM, can be changed "live" by a quick select recall. To protect keyers from unexpected changes, do not enable **Allow on air changes**. When this is not selected, the contents of the keyer will not be altered if the keyer is on air.

When you recall a quick select that includes an effect, the effect will be applied to the PGM content. The PST monitor may not display exactly what you will see when you take the effect to air. You will not see the saved source when the effect is recalled. Instead you will get what is currently on PGM as the source for your effect.

When you recall a quick select that does not have a preview, you will not see it on the PST monitor at all. When you take that effect to the PGM bus, it will be fine.

When you have a single-channel effect with no PST, recalling a quick select will apply the effect to the control panel, where you will be able to see the PST buttons lit, but you will not be able to see it on the PST monitor. However, when you take the effect (or an AutoTake happens), the effect will appear on the PGM bus. When you bring the quick select to the PGM, the effects will appear Dual Channel. They will be applied with the recalled PST.

When you have a 2-channel effect you will see no preview on PST, but when you press Take (or an AutoTake happens), the effect will take place on the PGM monitor. During a 2-channel effect (PGM and PST), only the PST source will change to the saved source. The PGM source will stay the same. This is to protect on-air content.

You cannot save an FX suspend as part of a quick select. Recall will bring that FX but not initiate FX Suspend. See “Suspending an Effect” on page 75 for more information.

However, if your quick select has multiple steps and Auto Take is active on the quick select, the first take will happen. You will have to trigger subsequent takes. Recalling a multi-step quick select will bring you to the beginning of the FX regardless of which step you saved it during the quick select save. For information on multi-step effects, see page 159. Multi-step effects often involve the Aux bus.

Background Transition in Quick Selects

Table 3-2 shows how the switcher will react upon selection of a quick select, depending on the status of the Background button on the switcher, and the status of the Background Transition checkbox in the IconMaster Configuration Utility.

Table 3-2. State of Background Transition Upon Recall of a Quick Select

Background Button on Switcher	Background Transition Checkbox Off in ICU	Background Transition Checkbox On in ICU
Off during QS save, on before recall	BKGD button stays on, FX will progress; Source will change	BKGD button turns off, FX will not progress; Source will not change
Off during QS save, off before recall	BKGD button stays off, FX will not progress; Source will not change	BKGD button stays off, FX will not progress; Source will not change
On during QS save, on before recall	BKGD button stays off, FX will not progress; Source will not change	BKGD button goes on, FX will progress; Source will change
On during QS save, off before recall	BKGD button stays on, FX will progress; Source may change	BKGD button stays on, FX will progress; Source may change

This differs from Effect Suspend in that during Effect Suspend you would be able to make a source change.

Note

A breakaway transition cannot be saved in a quick select.

Background Source in Quick Selects

Using the Background Source check box in the IconMaster Configuration Utility, you can determine whether you want the monitor's (PST or PGM) content to be included in the recall. This could be useful if you want to apply your standard "look" to any source.

Table 3-3 shows how the switcher will react upon selection of a quick select, depending on the status of the **Background Source** checkbox in the IconMaster Configuration Utility.

Table 3-3. State of Source Upon Recall of a Quick Select

State of Background Source Checkbox in ICU	State of PGM Monitor after Recall of Quick Select
Off	PST source, keys, transition rate, etc. are unchanged
On	PST source, keys, transition rate are updated as per the state when the quick select was selected

Adjusting Parameters with the Control Cluster

On a hardware control panel, the Parameter Adjustment Control cluster is located in the center of the IconMaster main control panel. Use this cluster to adjust transition control parameters within the IconMaster system.

- For instructions on how to maneuver through the control parameters, see page 12.
- For a list of Keyer control parameters, see page 53.
- For a list of Transition control parameters, see page 66.
- For a list of Quick Select control parameters, see page 48.

On a software control panel, the same functions are available in the Dynamic menus. See:

- "External Keyers in a Software Control Panel" on page 54
- "Internal Keyers on a Software Control Panel" on page 59

Adjusting External Keyer Control Parameters

The Keyer Control makes it possible to adjust the parameters of each key separately.

To enter the Keyer control menu, select **KEYER** from the upper level menu list in the Parameter Adjustment Control cluster of a hardware control panel.

KEY #1 to 2 (external keys): Select the Key you want to change from the next menu tier. Once the key is selected, the following selections are available:			
	PROC (Process) allows the adjustment of the key processing parameters.		
		TRSP (0% to 100%; factory default value = 100%) refers to the amount of transparency of the resulting keyed signal. One hundred percent transparency means the key is fully "on," while zero transparency means the key is fully "off."	
		GAIN (0 to 16; factory default value = 1.3) refers to the gain applied to the key signal (after the application of the clip/offset value).	
		CLIP (0 to 896; factory default value = 40) refers to the clip or offset value, which is subtracted from the key signal input.	
	TYPE allows the modification of the key attributes. (Factory default value = **POLAR**.)		
		POLAR refers to the polarity of the key. (Factory default value = **NORM**.)	
			NORM (Normal) means the key is used without modification.
			INV (Invert) means the key is inverted.
		TYPE determines the type of the key. (Factory default value = **ADD**.)	
			SELF forces the luminance channel of a fill input signal to generate a key instead of using an external key input signal to cut it.

			EXT (External) causes an external key input signal to cut the hole and a separate fill input signal to be inserted into the shape cut by the key input signal.
			ADD (Additive) means the fill is inserted without processing. Note: the fill must have a black background.
	FILL determines the type of the fill.(Factory default value = **EXT**.)		
		MATT (Matte) causes a key effect in which the inserted fill input signal is created by a local matte (a solid color signal that may be adjusted for chrominance, hue, and luminance) generator.	
			LUM (Luminance) (0% to100%) refers to the value of the matte luminance (brightness) signal.
			SAT (Saturation) (0% to 100%) refers to the value of the matte chrominance (saturation) signal.
			HUE (0 to 359) refers to the value of the chrominance phase.
		EXT causes an external fill input signal is inserted into the shape cut by the key input signal.	
	EXIT goes back to the previous menu.		

External Keyers in a Software Control Panel

To activate the External Keyers control, do one of the following:

- Press **External Keyers** under Dynamic Page Controls
- Press External Keyer (1 or 2) in the transitions cluster

The following sub-panel appears:

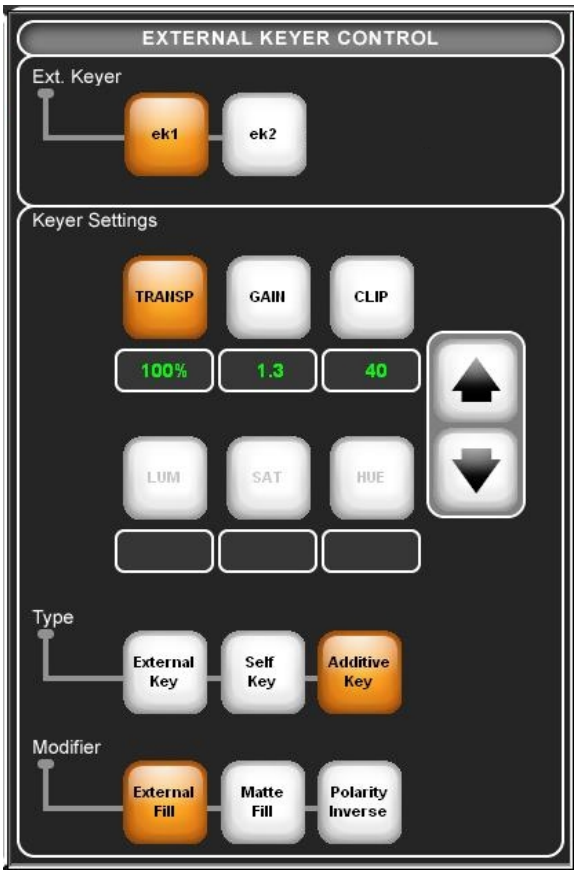


Figure 3-13. External Keyer Control Sub-Panel

This screen allows you to select each of the two external keyers on the selected IconMaster master control switcher and adjust the parameters associated with that key. These settings can also be adjusted using the keyer Control menu in the upper level menu list of the Control Cluster. See “Navigating the Keyer Control” in your *IconMaster Master Control Switcher Installation and Operation Manual* for more information.

1. Press **Ext Key 1** or **Ext Key 2**. The relevant sections of the sub-panel update with data retrieved from the IconMaster channel (the status and values of that key on the channel).

2. Adjust the processing parameters of the selected key by pressing the up/down arrow buttons.

Table 3-4. Processing Parameters for Keys 1 and 2

Parameter	Function	Range
Gain	Applies gain to the key signal after application of the clip/offset value	0 - 16
Transparency	Adjusts the amount of transparency of the resulting keyed signal	0 (off) - 100% (on)
Clip	Subtracts the clip or offset value from the key signal input	0 - 896
Hue	(Matte Fill only) Adjusts the phase of the chrominance of the signal	0 - 359
Saturation	(Matte Fill only) Adjusts the chrominance of the signal	0 - 100%
Luminance	(Matte Fill only) Adjusts the brightness of the signal	0 - 100%

3. The following buttons are active:

Table 3-5. Key Types

Button	Effect
Self Key	Forces the luminance channel of the fill input signal to generate the key instead of using an external key input signal to cut it
External Key	Causes an external fill input signal to be inserted in to the shape cut by the key input signal
Additive Key	Inserts the fill without processing (the fill must have a black background)

Table 3-6. Key Modifiers

Button	Effect
Matte Fill	Causes the key effect in which the inserted fill input signal is created by a local matte (a solid color signal that may be adjusted for chrominance, hue, and luminance) generator
External Fill	Causes an external fill input signal to be inserted into the shape cut by the key input signal
Polarity Inverse	Inverts the polarity of the key

Use these buttons to build a key. As you select or deselect buttons here, the data is sent to the IconMaster Key.

When the configured key is triggered on the channel, the new data sent from ISCP will be used.

4. When your key is complete, press **Take** to put it on air.

Example: Adjusting Gain on Key 1 using the Keyer Control (Hardware Control Panel)

The following diagrams illustrate a typical example of adjusting gain on **Key 1** using the **Keyer Control**.

1. Using the left scroll knob, highlight **KEYER** from the upper level menu list (Figure 3-14).

Figure 3-14. Keyer Highlighted

2. Press the left scroll knob to select the keyer control.
3. Using the left scroll knob, highlight **KEY1** from the menu list (Figure 3-15).

Figure 3-15. Key1 Highlighted

4. Press the left scroll knob to select **Keyer 1**.
5. Using the left scroll knob, highlight **PROC** from the menu list (Figure 3-16).

Figure 3-16. Proc Highlighted

6. Press the left scroll knob to select **PROC**.
7. Press the LCD button displayed as **GAIN**.

   The button background color will change to orange to indicate it is currently active (Figure 3-17).

Figure 3-17. Gain Selected

8. Rotate the right scroll knob to adjust the gain value.

Adjusting Internal Keyer Control Parameters

To enter the Keyer control menu on a hardware control panel, select **KEYER** from the upper level menu list in the Parameter Adjustment Control cluster

<table>
<tr><td colspan="3">
CAUTION
On power up, the Key functions for Keys 3 to 6 are not available until all of the IconLogo logos have been loaded from the compact flash card to the online memory. Selecting a key during this time will have no effect. Once all logos have been loaded, the key functionality will return to normal operation. The Control panel and ISCP will display "please wait: loading logos" in the internal keyer tallies until the logos are available.</td></tr>
<tr><td colspan="3">KEY #3 to 6 (internal keys)*: Select the Key you want to change from the next menu tier. Once the key is selected, the following selections are available:</td></tr>
<tr><td></td><td colspan="2">PROC (Process) allows the adjustment of the key processing parameters.</td></tr>
<tr><td></td><td></td><td>TRSP (0% to 100%; factory default = 100%) refers to the amount of transparency of the resulting keyed signal. One hundred percent transparency means the key is fully “on,” while zero transparency means the key is fully “off.”</td></tr>
<tr><td></td><td></td><td>GAIN (0 to 8; factory default = 1.0) refers to the gain applied to the key signal (after the application of the clip/offset value).</td></tr>
<tr><td></td><td></td><td>CLIP (0 to 896; factory default value = 0) refers to the clip or offset value, which is subtracted from the key signal input.</td></tr>
<tr><td></td><td colspan="2">POSN (Position) allows the real-time adjustment of a logo’s position on-screen. (See page 61 for information.)</td></tr>
<tr><td></td><td></td><td>HOR <-> allows horizontal adjustment of the logo.
VER | allows vertical adjusment of the logo.</td></tr>
<tr><td></td><td colspan="2">AUDIO allows the setting of the audio mix ratio of a previously defined logo with audio. (This is available with MGI3902/MGI3903 only, and will not appear if a MGI3901 card is present in a system.)</td></tr>
<tr><td></td><td colspan="2">LOGO allows you to assign a pre-loaded logo to the key. Logos are downloaded or created using LogoCreator, or natively on IconLogo, using the IconLogo soft panel.</td></tr>
<tr><td></td><td colspan="2">EXIT goes back to the previous menu.</td></tr>
</table>

* These keys are not functional on IconMaster Lite.

Internal Keyers on a Software Control Panel

This screen allows you to select each of the logo keyers on the selected IconMaster master control switcher and adjust the parameters associated with that key. These settings can also be adjusted using the keyer Control menu in the upper level menu list of the Control Cluster. See “Navigating the Keyer Control” in your *IconMaster Master Control Switcher Installation and Operation Manual* for more information.

To Configure an Internal Keyer:

1. To activate the Internal Keyers control, do one of the following:
   - Press **Internal Keyers** under Dynamic Page Controls, and then click on the Logo keyer button that corresponds to the logo you want to modify.
   - Press one of the four Internal Keyers in the transitions cluster.

   If you load the current on-air logo, you run the risk of changing that logo while it is on air.

   The following sub-panel appears:

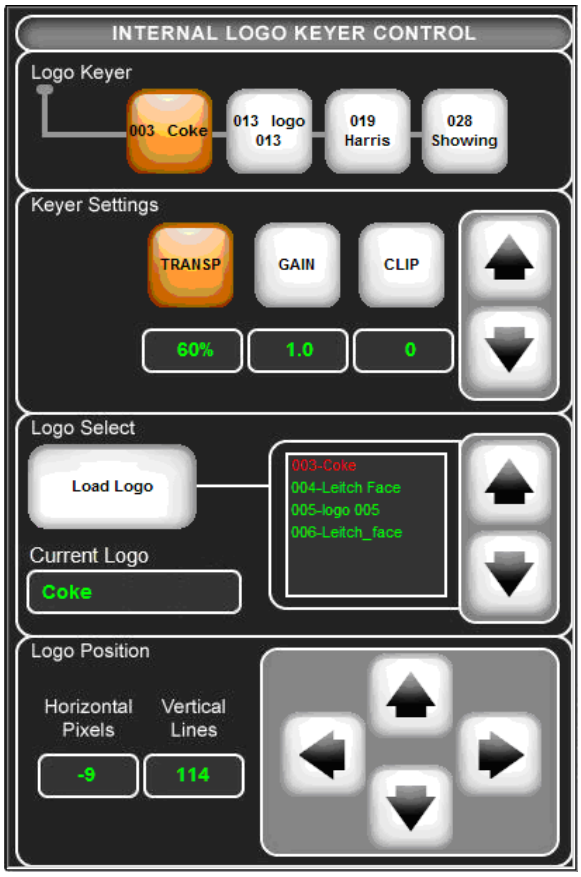


Figure 3-18. Internal Keyer Control Sub-Panel

2. Under Keyer Settings, adust the **Gain**, **Clip** and **Transparency** fields by pressing the up/down arrow buttons.

Table 3-7. Processing Parameters for Keys 3, 4, 5, and 6

Parameter	Function	Range
Gain	Applies gain to the key signal after application of the clip/offset value	0 - 8
Transparency	Adjusts the amount of transparency of the resulting keyed signal	0 (off) - 100% (on)
Clip	Subtracts the clip or offset value from the key signal input	0 - 896

3. Under Logo Select, choose a different logo by pressing **Up** and **Down** buttons below the logo screen to scroll through the list.

   The name of the logo in that keyer appears in the **Current Logo** field.

4. Press the arrow buttons in the Logo Position section of the screen to move the logo. The **Horizontal Pixels** and **Vertical Lines** fields update to indicate the position

   0, 0 represents the top left corner of the screen.

5. Press **Load Logo** to commit the selected logo to the channel.

Selecting an Internal (Keyers 3 - 6) Logo (Hardware Control Panels)

You can select any logo assigned to a specific keyer using the **LOGO** keyer control parameter.

1. Using the left scroll knob, highlight **KEYER** from the upper level menu list, and then press the left scroll knob to select the keyer control.
2. Highlight the appropriate keyer name from the menu list, and then press the left scroll knob to select it.

Note

On the software control panel, control of logo audio parameters is within the audio's dynamic menu, not in the internal logo keyer control dynamic menu page.

Adjusting an Internal Logo Position (Hardware Control Panels)

You can adjust the logo position of any internal logo, on-screen, in real time, using the **POSN** keyer control parameter. (External keyerss cannot be positioned.)

1. Using the left scroll knob, highlight **KEYER** from the upper level menu list, and then press the left scroll knob to select the keyer control.
2. Highlight the appropriate keyer name from the menu list, and then press the left scroll knob to select it.

3. Using the left scroll knob, highlight **POSN** from the menu list (Figure 3-19), and then press the left scroll knob to select it.

Figure 3-19. POSN Keyer Control Parameter Selected

4. Press the LCD button displayed as **VER |**.

   The button background color will change to orange to indicate it is currently active (Figure 3-20).

Figure 3-20. VER | Control Activated

5. Turn the right scroll knob until it reaches the vertical position you want.

   You can watch the vertical movement of the logo on-screen.

6. Press the LCD button displayed as **Hor <->**.

   The button background color will change to orange to indicate it is currently active.

7. Turn the right scroll knob until you reach the horizontal position you want.

   You can watch the movement of the logo on-screen.

The horizontal and vertical values are assigned to a particular logo, not to the keyer itself. If you assign a different logo, that logo's position information will be assigned to the keyer. If, however, you assign the changed logo back to the original keyer, the changed horizontal and vertical values will be assigned to it.

The Fast Reset function will not restore original position values to logos that have been assigned new horizontal and vertical values through the **POSN** parameter.

Attaching Audio to a Logo

This selection determines the audio that plays with the logo.

Note

Logo audio is available with MGI-3902/MGI-3903 only.

Logo audio must meet the specifications listed in Table 3-8. If your audio file does not meet these specifications, you must convert it prior to attaching it to a logo.

Table 3-8. Logo Audio Specifications

Item	Specification
Sample rate	48 Khz
Bits	16-bits
Format	WAV (*.wav)

To transfer an audio file to the IconMaster, the WAV file must first be transfered to the MGI card, and then associated with the desired logo.

1. In a CMD window on the PC connected to the IconMaster, use the CD command to go to the directory that contains your WAV files.
2. Use the PC Windows “FTP” command to connect to the IP address of the MGI, and then log in as "leitch" with password "LeitchAdmin".
3. Use the ‘cd’ command to go to the correct store location on the MGI-3902/MGI-3903.

   This location will be "cd /pcdisk/image".
4. Typethe “binary” to set the FTP to the correct transfer mode.
5. Type “Put <desired.wav>” to move the WAV file to the MGI module.
6. Load the IconLogo Soft Control panel, and then connect to the MGI module.
7. Double click **Logo** on the left hand side of the window.

   The entire list of logos available on the MGI will appear.
8. Scroll through the list until the highlight bar is on the logo, and then press F5 on your keyboard to select the logo.
9. Scroll down to **Audio Source**, and then click **Audio File**.

   The IconLogo will show a file UI to select the desired WAV file.
10. If the wrong directory is selected, use the "File Path" UI to change to the /pcdisk/image directory.
11. Select the desired WAV file.

    Wait while the WAV file is processed by the MGI. Confirm that no error report is presented by the MGI.

12. Select **Audio levels** to pick the default Mix level for the logo when selected on air.
13. Ensure that **Audio Play** is set to **On Take**.
14. For Audio Grp 1 through 4, ensure that the channel mappings are configured for the AES audio of the Logo.

    These are typically “Lft Rgt Lft Rgt” for each group.

Your logo with audio is ready to go to air.

Adjusting the Logo Audio Mix Ratio

IconMaster's logo generator[1] provides the ability to attach an audio .WAV file to a logo. When played, the logo's audio is mixed into the IconMaster's program audio path.

1. Using the left scroll knob, highlight **KEYER** from the upper level menu list, and then press the left scroll knob to select the keyer control.
2. Highlight the appropriate keyer name from the menu list, and then press the left scroll knob to select it.
3. Using the left scroll knob, highlight **AUDIO** from the menu list (Figure 3-21), and then press the left scroll knob to select it.

Figure 3-21. Audio Keyer Control Parameter Accepted

If the Audio Control Panel is attached to the Harddware Control Panel, Logo Audio mix ratios for each internal keyer can be selected by pressing the Audio Overs button.

[1] The Logo Audio function is supported by IconMaster systems using MGI-3902 or MGI-3903 modules. Systems using MGI-3901 modules, and IconMaster LITE systems, will not support Logo Audio.

Adjusting the Transition Rate

Within the Transition parameter, you can select a transition rate.

Figure 3-22. Transition Rate

To enter the Transition Control menu

1. Using the left scroll knob, highlight **TRANS** from the upper level menu list in the Parameter Adjustment Control cluster, and then press the left scroll knob to select the transition control.
2. Using the left scroll knob, highlight **RATE** from the menu list, and then press the left scroll knob to select the transition rate. Once **RATE** is selected, the following options are available.
   - SLOW
   - MED
   - FAST
   - CUT

Selecting an option cancels the previous selection.

If the transition rates are assigned to the buttons in the Transition Cluster of the Control Panel, the previous transition's button will extinguish and the new transition's button will illuminate.

Changing Key Parameters through the Fast Reset Function

The Fast Reset[1] function allows you to quickly reset keyer settings to factory reset values, or to user-saved reset values.

Press and hold the **Fast Reset** button while pressing any of the six video keyer transition enable buttons to reset the keyer clip/gain/transp settings, as well as the **PROC** keyer control parameter (key invert, type, matte fill, etc.) settings.

There are three separate operations that are enabled in the Parameter Adjustment Control cluster when the **FAST RESET** button is pressed: **SET**, **CLEAR**, and **RECALL**.

[1] The Fast Reset function will not restore original position values to logos that have been assigned new horizontal and vertical values through the **POSN** parameter.

Figure 3-23. Fast Reset Operations

- **SET** Operations: If the **SET** function is enabled, the parameter will not be reset, but its current value will be saved as the source's user-saved reset value. This is the value that will be used during a **RECALL** operation, and will not reset audio mix settings for the logo audio. See "Setting Keyer Functions" on page 67 for instructions on how to perform this operation. To clear the user-saved values, use the **CLEAR** operation.
- **CLEAR** Operations: If the **CLEAR** function is enabled, the user-saved reset value will be cleared (back to factory value), and the keyer's parameters will also be reset back to this factory value. See "Clearing Keyer Functions" on page 68 for instructions on how to perform this operation.
- **RECALL** Operations: If the **RECALL** function is enabled, the user-saved reset value set up through a **SET** operation will be applied. If a reset value has not been set, the factory values will be recalled and applied. See "Recalling Keyer Functions" on page 68 for instructions on how to perform this operation. The **RECALL** function is the default operation enabled when the **FAST RESET** button is pressed.

Setting Keyer Functions

1. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.
2. Without releasing the **FAST RESET** button, press the **SET** button. The LCD display button will change from green to orange. Keep the **FAST RESET** button pressed.
3. Press and release the keyer button whose keyer settings you want to save as the user-saved values.
4. Release the **FAST RESET** button.

   The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Recalling Keyer Functions

1. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.
2. Press and release the keyer button whose keyer settings you want to recall.
3. Release the **FAST RESET** button.

   The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Clearing Keyer Functions

1. Press and hold the Fast Reset button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.
2. Without releasing the **FAST RESET** button, press the **CLEAR** button. The LCD display button will change from green to orange.
3. Press and release the keyer button whose keyer settings you want to clear back to factory values.
4. Release the **FAST RESET** button.

   The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Chapter 4

Effects

Overview

This chapter explains the use of the Effects (FX) button on an IconMaster control panel. It also provides information about creating and configuring effects that will be used when manipulating on-air content.

This chapter covers the following topics:

- “Introduction: Effects (FX) Control” on page 70
- “Creating an Effect” on page 72
- “Selecting an Effect” on page 72
- “Setting An Effect Transition Rate” on page 74
- “Running an Effect” on page 74
- “Suspending an Effect” on page 75
- “Cancelling an Effect” on page 75
- “Adjusting Effects Control Parameters” on page 75

This chapter presupposes that you are familiar with the layout of an IconMaster control panel. If you are not, please refer to Chapter 1: “Introduction” for more information.

Introduction: Effects (FX) Control

On your IconMaster control panel, viewing and selecting effects is done through the **FX** button, located in the Transition Functions cluster at the bottom of the control panel. When enabled, the **FX** button allows you to view and select available effects that will ultimately appear on air.

Figure 4-1. Effects Button[1] (Hardware Control Panel)

[1] If the BKGD button is not enabled, no effects will operate.

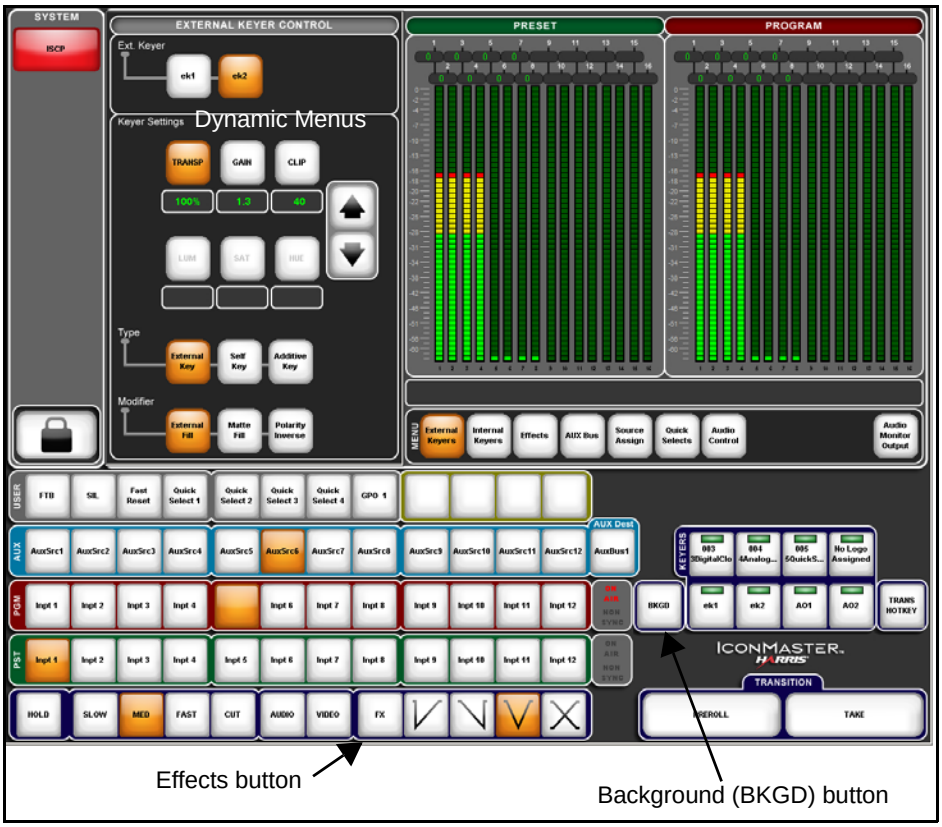


Figure 4-2. Effects Button (Software Control Panel)

You can create and store up to 16 different effects, each with up to 4 sequences, through the ICU Effects dialog box. See page 159 for instructions. Some of the types of effects available include the following:

- Squeezes (the continuous expansion or shrinking of a screen image without cropping it)
- Wipes (a transition in which a second image, framed in some geometrical shape, gradually replaces all or part of the first image)
- L-bars
- Dual-channel effects
- Background effects (a video source is revealed when a squeeze, wipe, or L-bar effect is applied)

Creating an Effect

In order to do effects, an IconMaster system must have an FX card. If there is no FX card, effects will be grayed out.

In an IconMaster environment, effects are created through the IconMaster configuration software utility, or ICU. Before you can use any of these effects, they must be uploaded to the IconMaster frame. See page 159 for more information.

You may or may not have access to the ICU software. If you do not, you must ask your system administrator to perform these operations for you.

Selecting an Effect

You can select an effect through the FX button or through the Effects parameter adjustment control (hardware control panel) or Effects dynamic menu (software control panel). For the effect to be performed, the **Background** transition must be selected.

In a two-channel effect, IconMaster can be configured for **Preview** operation or **PST** squeeze. In the **Preview** mode, the Preset output will always show the upcoming segment of the selected effect. In the **PST** mode, the second channel squeezes back the **PST** bus output and offers a fully independent two-channel squeeze effort. **Preview** is not allowed in this operational mode.

Selecting an Effect with the FX Button

1. Press the **FX** button.

   The effect name will be displayed in the Parameter Adjustment Control cluster in the upper center of the hardware control panel, or in the Selected Effect section of the Dynamic Effect menu.

2. Continue pressing the **FX** button to scroll through the pre-configured effects until you have selected the effect you need.

   If there is no squeeze background (that is, the **Squeeze Bkgd** input on the MKE-3901 is not connected), one of these conditions will apply:

   - **Non-Sync** will be displayed in the control cluster display next to the effect name.
   - The squeeze background is untimed due to the wrong video standard on the input.

If Channel “B” is the background source for an effect, a “flash” may result, because you are trying to use the “B” channel as both the background and a squeeze source at the same time. You should only use this type of operation in a single channel environment while using the Squeeze Background “C.”

Selecting an Effect through the Effects Control (Hardware Control Panel)

Using the Effects Control, you can select an effect previously created in the IconMaster configuration utility software.

Note

You can configure this control through the IconMaster configuration software Effects dialog box. See page 159 for instructions.

1. To enter the Effects control menu, select FX from the upper level menu list in the Parameter Adjustment Control cluster. (See page 75 for more detailed information.)

   Once **FX** is selected, the list of available effects will be displayed on the rightmost LCD button.

2. Use the right scroll knob to select an effect.

Navigation is complete when parameters are displayed on any of the remaining LCD buttons. The display buttons that are furthest to the right indicate the parameter name on top with the parameter value or option below. You can change the parameter values and options by selecting the display button for that parameter (the LCD illuminates orange) and then adjusting the right scroll knob. Press the right scroll knob to take the selection.

Selecting an Effect through the Dynamic Menus (Software Control Panel)

When you press **Effects** under Dynamic Page Controls, the following sub-panel appears:

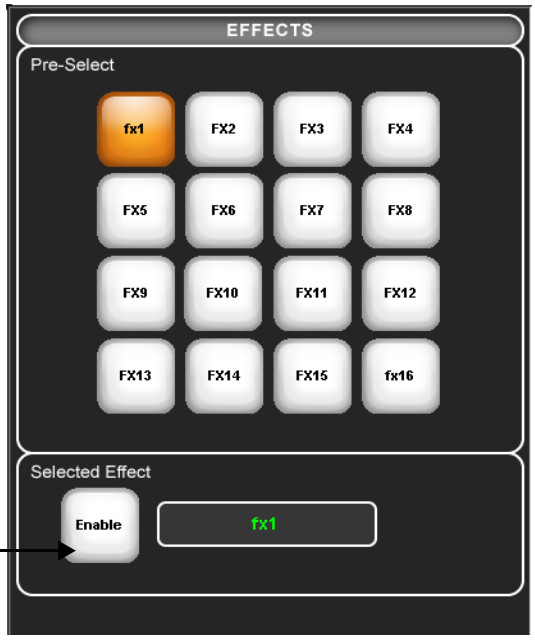


Figure 4-3. Effects Sub-Panel

The screen updates to display the names of the effects that are currently loaded on the IconMaster (updated every time you press the **Effects** button). If there is not an effect associated with any particular button, that button will be greyed out.

The effect that is currently active on the channel (the effect that will be used in the next transition) is lit orange.

To make an effect the active effect on the channel, press one of the **Pre-Select** buttons (**Effect 1** to **Effect 16**) to choose a specific effect.

Enabling an effect does not trigger that effect; it makes that effect the active effect for the next transition triggered by the IconMaster channel.

Setting An Effect Transition Rate

1. Select an effect.
2. Press the **Slow, Med**, **Fast, or Cut** button in the Transition Functions cluster.

Figure 4-4. Effect Transition Rate Buttons

When an Effect transition is selected, the FX button is illuminated and all other lights for transition types are extinguished.

Running an Effect

1. Select an effect.
2. Set the transition rate.
3. Press the **Take** button in the Transition Control cluster.

   Each press of the **Take** button will run a segment of the effect. When the last segment has been run, the lamp in the **Effects** button will go out.

When you have a multi-segment effect, you have to press **Take** to go to the next segment.

Standard Transitions

If another transition type, such as **V-Fade**, is selected while in the middle stage(s) of an effect, selecting **Take** will transition the entire effect off to a full frame “B” preset source.

Keys and Audio-Overs During an Effects Transition

Selecting **Keys 1** through **6** and **A/O** (audio-over) **1** and **2** is allowed during an **Effects** transition, even though no transition type is selected.

Suspending an Effect
(FX Suspend)

When suspending an effect, you temporarily stop an effect sequence mid-cycle, and allows regular transitions of Preset-to-Program. To suspend an effect:

1. Select a source on the Preset bus.
2. Select an effect (i.e., press the pushbutton that corresponds to the effect you want to suspend).
3. Press **Take** to initiate the squeeze.
4. Press the **Effect** button.

   It will blink to indicate the effect is suspended.
5. Select a new source on Preset bus, and then perform normal transitions into the squeezed window.
6. Press the Effect button again to unsuspend the effect and continue where the effect was before being suspended.
7. Press **Take** to continue the original effect.

Cancelling an Effect

To cancel an effect that you have created, press the **Take** button while the effect is transitioning, or hot punch the PGM bus to eliminate the effect.

Adjusting Effects Control Parameters

Figure 4-5. Parameter Adjustment Control Cluster

The Parameter Adjustment Control cluster is located in the center of the IconMaster main control panel. Use this cluster to adjust effects control parameters within the IconMaster system. For instructions on how to maneuver through the control parameters, see page 12.

Using the Effects Control, you can select an effect previously created in ICU. To enter the Effects Control menu, select FX from the upper level menu list in the Parameter Adjustment Control cluster. Once **FX** is selected, the list of available effects will be displayed on the rightmost LCD button. Use the right scroll knob to select an effect.

Chapter 5

Audio Operations

Overview

This chapter explains the use of audio on an IconMaster system.

This chapter covers the following topics:

- “Audio Overs” on page 78
- “Breakaways” on page 79
- “Audio Monitor Output (Software Control Panels Only)” on page 82
- “Using the Optional Audio Control Panel (Hardware Control Panels)” on page 83
- “Adjusting Audio Control Parameters” on page 93
- “Changing Audio Gains through the Fast Reset Function” on page 98
- “Audio Control (Software Control Panels)” on page 102

This chapter presupposes that you are familiar with the layout of an IconMaster control panel. If you are not, please refer to Chapter 1: “Introduction” for more information.

Audio Overs

An audio-over is a type of audio key used to mix a second audio signal with the Program audio by using one or both of the available audio-over buttons.

Note

An audio over can also be created by adding an audio (WAV) file to a logo. See “Adjusting the Logo Audio Mix Ratio” on page 65 for more information.

Audio over selections are set up through the ICU. Two AES audio pairs (four mono channels) are freely assignable to the two audio overs. See “Audio Over Matrix Settings” on page 152.

Audio gain control is controlled through the Audio Over Ratio (**AO RAT**) parameter. Audio levels range from -108 dB (silence) to +12 dB. If you have installed an optional audio control panel, you can mix the audio signals there as well. See page 97 for more detailed information.

Selecting an Audio Over

Press an **A/O** button.

It illuminates, indicating that an audio-over transition (from the **Preset** bus to the **Program** bus) will occur when **Take** is selected.

Taking an Audio-Over On Air

1. Press an **A/O** button.

   It illuminates, indicating that an audio-over transition (from the **Preset** bus to the **Program** bus) will occur when **Take** is selected.

2. Press **Take**.

   Once the transition is taken, the LCD input source display illuminates red (to indicate that the audio-over transition is on-air) and the **A/O** button remains illuminated. This means that the selection will once again be included in the next set of transitions.

Keeping an Audio Over On Air

If an audio-over is on air and the **A/O** button’s LCD display is red, press the **A/O** button until the button tally light is off. The audio over transition will be disabled for the next transition, and the key will remain on-air.

Taking an Audio-Over Off Air

1. The A/O LCD will be red, indicating that the audio-over transition is currently on air.
2. Press the **A/O** button until the button tally is illuminated.

3. Press **Take**.

   The LCD display will turn green and the key button will stay illuminated.

To keep the key off air, press the **A/O** button to turn off its tally light.

Breakaways

A breakaway is an operation in which the audio and video signals do not automatically follow one another; that is, audio and video are switched in separate operations. Using the **Audio** and **Video** breakaway buttons, you can take a transition in which the audio and video signals do not automatically follow each other (the audio and video signals are split).

Breakaway operation is supported only when the system is configured with all input sources having discrete audio inputs. Breakaway operation with embedded audio inputs is not supported.

Setting Up Breakaways

You can select a breakaway function by pressing either the **Audio** or **Video** breakaway button. The breakaway button is now illuminated. If you choose a transition type or make a selection on one of the two busses (**Program** or **Preset**) the breakaway button will extinguish. If you press **Take** on a transition, the transition starts according to the selected breakaway state and the button tally is extinguished.

Note

Audio breakaways cannot be assigned directly using the Program bus.

When there is a *married crosspoint* (that is, no breakaway), neither of the **Breakaway** buttons will illuminate. Once you use a breakaway button, the corresponding button tally will illuminate to reflect the selected breakaway status. A breakaway is indicated when the audio source button is lit green, while the video source button is lit in an amber color.

Table 5-1 shows the different conditions under which the tallies are illuminated.

Table 5-1. Breakaway Button Tally Indicators

Button Selected	Video Button Tally	Audio Button Tally
Video and audio	Off	Off
Video only	Fully bright	Off
Audio	Off	Fully bright

Setting Breakaway Options

You can set several types of breakaways using the **Audio** and **Video** buttons of the Configurable Transitions bus (see Table 5-2).

Table 5-2. Breakaway Options

Option	Description
Source Breakaway	Transitions an input source on the Program or Preset bus
Transition Type Breakaway	Selects a different transition type between the video and audio signals
Transition Take Breakaway	Take video-only or audio-only transitions.

Split Audio and Video Sources (Source Breakaway)

Normally, the audio source selection follows the video source selection, but in some cases it may be desirable to split the two selections.

Note

Source breakaways are not available for embedded audio sources.

You can use Source Breakaways on the **Preset** bus without any difficulty. However, this procedure is not recommended on the **Program** bus. The **Program** bus indicates sources that are currently on-air and any breakaway selected while a program is on-air will be transmitted immediately.

Breakaway Using Discrete Audio

With discrete audio, the audio being processed is taken from the IconMaster's discrete audio inputs.

To select a video source breakaway on the **Preset** bus:

1. From the Breakaway cluster, press the **Video** button.

   The button will illuminate to reflect the selection.

2. Select a video source on the **Preset** bus.

   When the selection is complete, the newly selected video source button (**Preset** bus) tally will illuminate (fully bright) and the original source button (now the audio only source) will illuminate green.

To select an audio source breakaway on the **Preset** bus:

1. From the Breakaway cluster, press the **Audio** button.

   The button will illuminate to reflect the selection.

2. Select an audio source on the **Preset** bus.

   When the selection is complete, the newly selected audio source button (**Preset** bus) tally will illuminate green and the original source button (now the video only source) will illuminate fully bright.

Assigning Different Transition Types to Audio and Video Signals (Transition Type Breakaway)

Normally, both the audio and video signals follow the same transition type. However, in some cases it may be desirable to assign a different transition type for each signal. A transition type breakaway is not automatically cancelled at the end of a transition.

To select a transition type breakaway on the **Preset** bus:

1. Press the **Video** or **Audio** breakaway buttons.
2. Select a transition type from the Transition Functions cluster.

   When the selection is complete, the audio transition type will illuminate green, and the video transition type will illuminate fully bright.

To cancel a transition type breakaway, press the appropriate breakaway button a second time, and then press **Take**.

Performing Video- or Audio-Only Transitions (Transition Take Breakaway)

Normally, the audio source selection follows the video source selection, but in some cases it may be desirable to perform video only or audio only transitions.

A transition take breakaway makes it possible to have a video only transition, or an audio only transition.

To select a transition take breakaway for an audio only transition:

1. Press the **Audio** breakaway button. By selecting the **Audio** button on the Breakaway cluster, you will assign all audio signals to breakaway.
2. Press the **Take** button.

To select a transition take breakaway for a video only transition:

1. Press the **Video** breakaway button.
2. Press **Take**.

Note

When a breakaway of embedded sources has been transitioned to the program bus, the preset bus is not operational. To exit this mode, reselect the appropriate breakaway and then press **Take**, or select a source on the Program bus.

After a **Transition Take** breakaway has been taken, the appropriate **Program** bus buttons illuminate to reflect the breakaway, and the buttons on the **Preset** bus illuminate to reflect the next event (the buttons will illuminate to green to indicate the selected audio source and full brightness for the video source).

To undo a Transition Take breakaway:

1. Press the **Audio** or the **Video** breakaway button.
2. Press the same breakaway button a second time.
3. Press the **Take** button (Transition Control cluster).

The **Program** and **Preset** bus button tally indicators will be restored to the status they were in before the first breakaway transition.

Audio Monitor Output (Software Control Panels Only)

When you press **Audio Monitor Output** under Dynamic Page Controls, the following sub-panel appears:

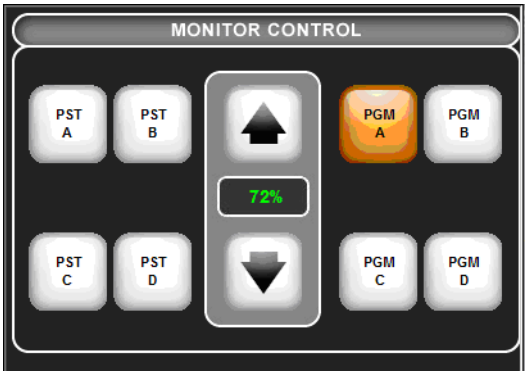


Figure 5-1. Audio Monitor Output Sub-Panel

Press the channel of the audio to monitor. Press the Up and Down arrows to change the level of the monitor outputs on the MKE-3901.

PST and PGM A through D indicate the audio pair that are being monitored.

ISCP displays 32 audio channels, showing the Preset audio meters on the left, and Program audio meters on the right. Each channel has a gain indicator.

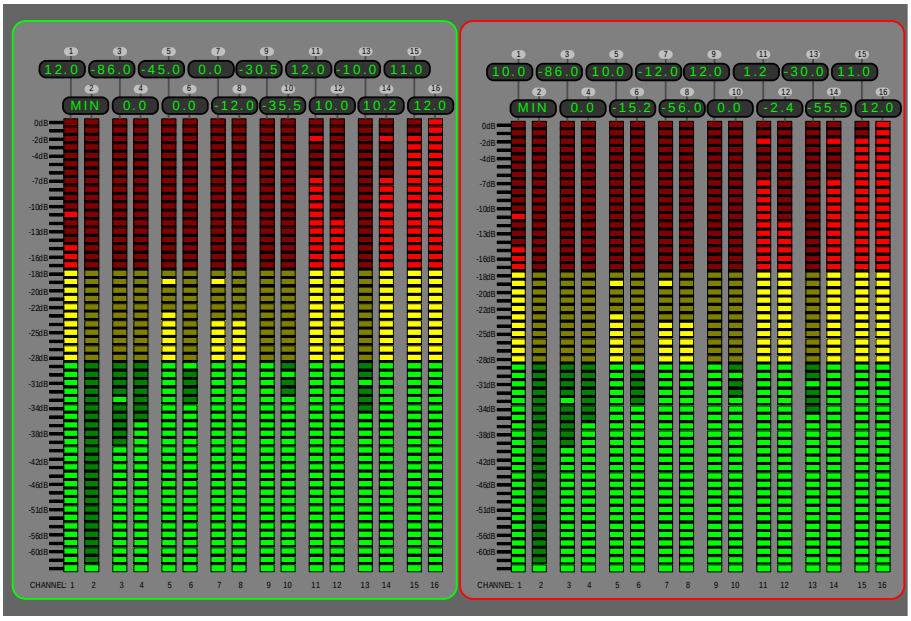


Figure 5-2. Audio Monitor Component of IconMaster Panel

Whenever you are operating audio controls with the ISCP, visual indicators will provide feedback to show which channels are being modified.

Using the Optional Audio Control Panel (Hardware Control Panels)

Figure 5-3. Audio Control Panel

The audio control panel (Figure 5-3) adds increased functionality to the main control panel, providing quick audio gain control to PGM and PST audio, monitor output selection, and audio-over ratios.

Select the audio channel control buttons located on the left side, facing the panel, to select the audio display you want. Depending on your selection, you can view mono channels, AES pairs, or channel clusters.

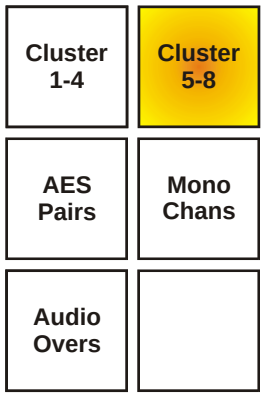
Turn the scroll knob located to the right of the display to change the gain for the displayed audio. See Figure 5-3 on page 83 for the location of the control knobs.

Audio Channel Controls

Figure 5-4. Audio Channel Controls (Left Side)

The **CLUSTER** select buttons allow you to adjust the gain for audio clusters 1 to 4 and audio clusters 5 to 8 as assigned in the ICU for both **PGM** and **PST** output. Press the appropriate cluster button to display the clusters

PST Selection		PGM Selection	
Cluster 1	Cluster 2	Cluster 1	Cluster 2
Cluster 3	Cluster 4	Cluster 3	Cluster 4

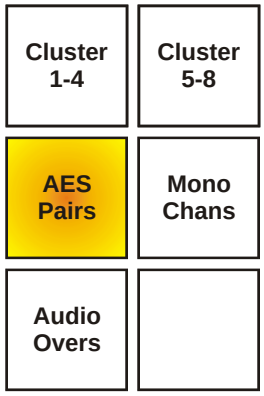


PST Selection		PGM Selection	
Cluster 5	Cluster 6	Cluster 5	Cluster 6
Cluster 7	Cluster 8	Cluster 7	Cluster 8

Note

In SD operation, IconMaster supports 8 or 16 channels of audio (configured using a parameter). If SD16 mode is set, AES 5 - 8 are available. AES pairs are set up through the ICU. See page 148 for more information.

The **AES PAIRS** button allows you to adjust the gain for AES pairs as assigned in the ICU for both **PGM** and **PST** output. (SD and HD discrete audio use A1 through A4. HD embedded audio uses A1 through A8.) Press the **AES PAIRS** button once to display AES 1 through AES 4, and then press it again to display AES 5 through AES 8



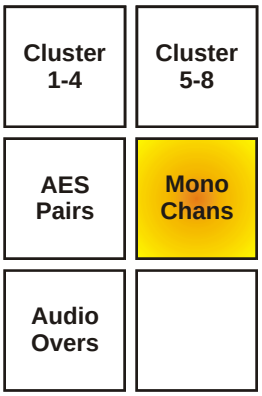
PST Selection		PGM Selection	
A1	A2	A1	A2
A3	A4	A3	A4
A5	A6	A5	A6
A7	A8	A7	A8

As an example, a primary channel might be a stereo pair or up to 6 pairs in a surround sound release. The associated knob adjusts the gain on all channels assigned to the primary control. You might then assign a second grouping to the second display as SAP, single, or multiple channels, and a third grouping to the third display, perhaps using Descriptive Video.

Note

In SD operation, IconMaster supports 8 or 16 channels of audio (configured using a parameter). If SD16 mode is set, Channels 9-16 are available. See page 148 for more information. HD embedded audio systems use all 16 mono channels.

The **MONO CHANS** button allows you to adjust the gain for mono channels 1 to 8 as assigned in the ICU for both PGM and PST output. Press the **MONO CHANS** button once to display channel 1 through channel 4. Subsequent presses of this button will toggle sequentially through the other channel groups.

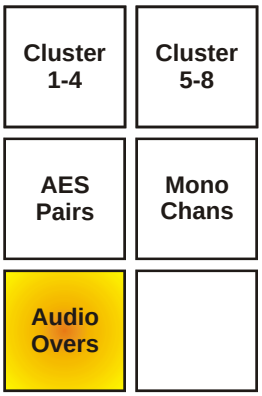


PST Selection		PGM Selection	
Channel 1	Channel 2	Channel 1	Channel 2
Channel 3	Channel 4	Channel 3	Channel 4
Channel 5	Channel 6	Channel 5	Channel 6
Channel 7	Channel 8	Channel 7	Channel 8

Note

You can set up mix ratios for audio over ratios through the ICU System Configuration dialog box. See page 184 for instructions.

The **AUDIO OVERS** button allows you to adjust the mix ratio for **AUDIO OVER 1** and **AUDIO OVER 2** and logo audio on the **PST** displays and knobs.



PST Selection				PGM Selection	
A/O 1 (%)	MAIN (%)	A/O 2 (%)	MAIN (%)	Channel 1	Channel 2
				Channel 3	Channel 4

There are two modes of operation that you can select for your audio overs in the ICU System Settings page: 50% (complementary) mix and 100% (traditional) mix.

- If **50% Mix** (complementary) is selected as a mode of operation, at 50% ratio the Audio Over and PGM audio each make up 50% of the mix. (See Figure 7-31 on page 187 for an illustration.) When you turn the scroll knob, as one percentage value goes up, the other percentage value goes down. For example:
  - A ratio of 100%/0% means 100% of audio over and 0% of PGM (main).
  - A ratio of 0%/100% means 0% of audio over and 100% of PGM (main).
  - A ratio of 25%/75% means 25% of audio over and 75% of PGM (main).
  - A ratio of 75% means 75% of audio over and 25% of PGM (main).
- If **100% Mix** (traditional) is selected as a mode of operation, at 50% ratio the mix will be 100% of Audio Over and 100% of PGM, and will decrease respectively as you move “left” or “right” to the 50% mark. (See Figure 7-32 on page 187 for an illustration.)

The LOGO AUDIO button allows you to adjust the mix ratio for LOGO AUDIO 1 and LOGO AUDIO 2 on the PST displays and knobs.

		PST Selection				PGM Selection	
Cluster 1-4	Cluster 5-8	A/O 1 (%)	MAIN (%)	A/O 2 (%)	MAIN (%)	Channel 1 Channel 3	Channel 2 Channel 4
AES Pairs	Mono Chans						
Audio Overs							

Press Audio Overs a second time to bring up the Logo Audio Mix levels. Logo audio is can be added to the internal four keyers, and the mixers are presented in the CP2.

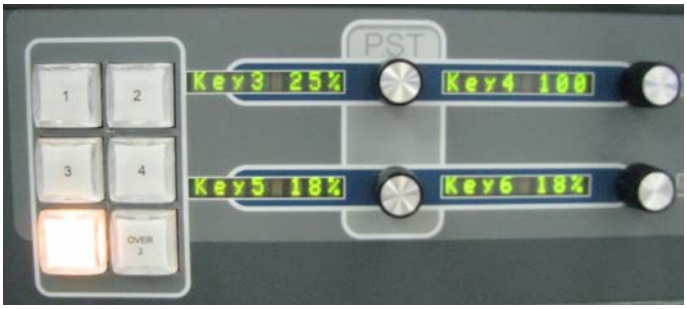


Figure 5-5. Audio Logos Interface

Gain Control

Note

If you have set up audio channels in more than one cluster or AES pair, you can change the gain for all of the audio channels in the cluster at the same time.

This gain control is a relative control that adjusts individual channel gains that are ganged together as an audio cluster. The display indicates the increment or decrement (in dB) as it is adjusted. Individual channel settings are performed under the Control cluster on the main panel. Audio channels can be matched using the Control cluster; then, this control can be used to adjust the matched channels simultaneously. Once an individual channel gain reaches a maximum of +12 dB, **Max** will be displayed; or, with a minimum of -83 dB, **S** (Silence) will be displayed. In addition, the control panel display will show one of the following symbols to identify if the gain is max (**T**), above unity (▲), unity (◆), below unity (▼), or silence (⊥). See Figure 5-6 for examples of the displays for above unity, below unity, max, and silence.

Figure 5-6. Control Panel Display Symbols

To see the exact gain in dB, press and hold the scroll knob directly to the right of the display.

Because we can have separate gain settings for Clusters, for AES Pairs, and for Mono Channels, the final resulting gain applied to each output channel will be affected by more than one of these parameters.

The final mono channel gain will be the SUM of all gains affecting that channel. For example, the final gain of Channel 1 will be:

- Gain of Mono Channel 1
- + Gain of AES Pair 1
- + For all Clusters: if (Channel 1 is in cluster), add Cluster Gain

It is possible for a channel gain to be made up of 10 separate gain values (mono + pair + 8x cluster). For example, assume that Cluster1 is made up of AES1+AES2 (= mono channels 1 thru 4), and this set of gain parameters has been set up by the operator:

Parameter	Gain Setting
Cluster1	+1.0 dB
AES1	+2.0 dB
AES2	-3.0 dB
Chan1	0.0 dB
Chan2	+2.0 dB
Chan3	-5.0 dB
Chan4	+1.0 dB

In this example, the resulting gains applied to the four channels will be:

Channel	Mono Channel Gain	AES Pair Gain	Cluster Gain	Resulting Gain
Chan1	0.0	+2.0	+1.0	+3.0 dB
Chan2	+2.0	+2.0	+1.0	+5.0 dB
Chan3	-5.0	-3.0	+1.0	-7.0 dB
Chan4	+1.0	-3.0	+1.0	-1.0 dB

You can see the cumulative gain for a channel if you press and hold the **MONO CHANS** button, and then press the corresponding knob. (If you press the button quickly it will change the channel display. Be sure to press firmly and hold the button down.)

All gains added on the PST or PGM bus are unique to the specific source that is in use. These may be different, depending on whether you are using static or dynamic inputs (see page 27).

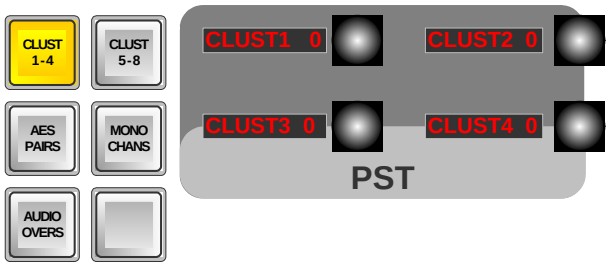
The audio over ratios will be displayed in the PST section of the control panel.

The remaining button (blank) is reserved for future use.

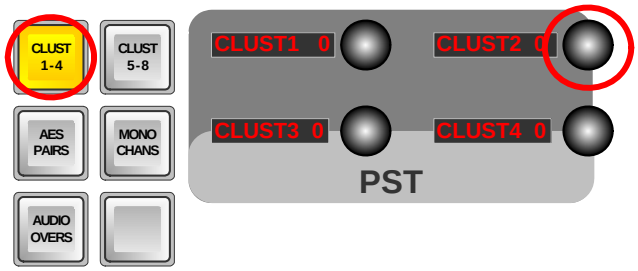
Breaking Down a Cluster into Mono Gains (Drilldown Mode)

You may wish to break down a cluster and adjust the mono channel gains of all channels that make up the cluster.

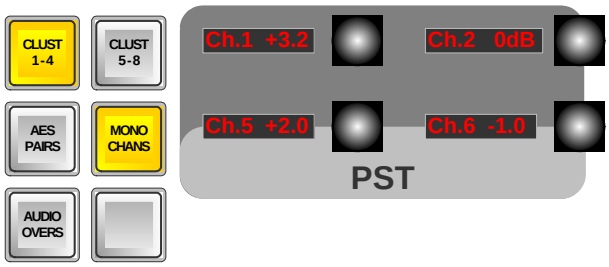
1. Press **CLUST 1-4** or **CLUST 5-8** to display the cluster you wish to break down into mono channels.



2. Press and hold the **CLUST** button, and then press the cluster's gain control knob.



This will enter the Cluster Mono Channel display mode, identified by the **CLUST** button at left still illuminated, and the **MONO CHANS** button flashing. The four displays and knobs will show the first four mono channels which are in the cluster.



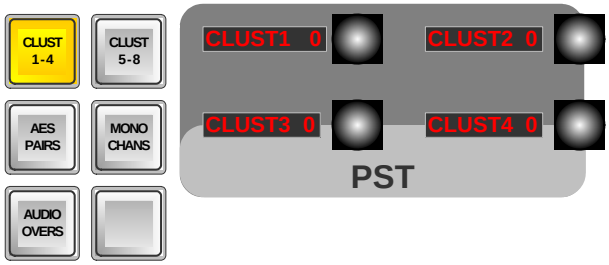
Press this same combination again (hold **CLUST** and tap on the corresponding cluster knob again) to display the next four mono channels within the selected cluster.

- If NO channels form the cluster, all four displays will be blank.
- If less than four channels form the cluster, the remaining displays will be blank.
- If more than four channels form the cluster, the first four channels will be displayed. To select the second set of up to four channels, use another two-button keystroke (press and hold the cluster button pressed, and then tap on the corresponding cluster knob again). Subsequent presses of this two-button keystroke will cycle through all groups mono channels of the selected cluster.

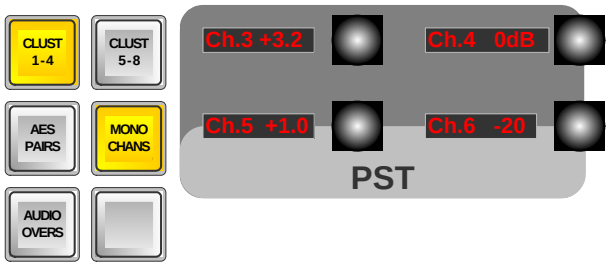
3. To exit this mode, press any of the left selection buttons.

For example, assume that Cluster 3 is made up of Channels 3, 4, 5, 6, 7, 8.

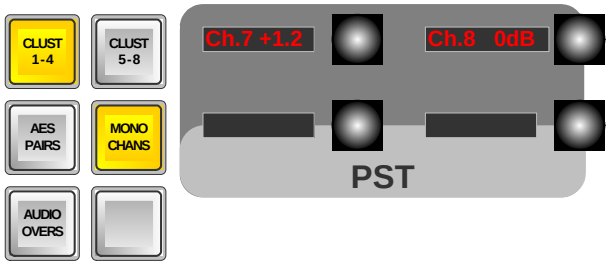
1. Select Cluster 3 by pressing the **CLUST 1-4** button.



2. Hold the **CLUST 1-4** button, and then press the Cluster 3 gain knob to bring up the **Mono Chans** display showing the first four mono channels of Cluster 3, which are Channels 3, 4, 5, and 6.



3. Hold the **CLUST 1-4** button and press ANY of the gain knobs to bring up the second set of four mono channels of Cluster 3, which are channels 7 and 8.



4. Displays 3 and 4 are blank, indicating no more mono channels are part of this cluster.

Monitor Control Cluster

Figure 5-7. Monitor Control Cluster

On the right of the panel, the Monitor Control cluster buttons select an AES pair for monitoring. You can adjust the volume using the audio control knob in the center of the Monitoring Cluster. Monitor Control is only available on the discrete Monitor Output.

The **Preset** controls apply to the input currently selected on the **PST** bus. The settings for this input are stored with the source.

The **PGM** controls apply to the input currently selected on the **PGM** bus. These settings are stored with source and replace any setting previously stored.

On the right of the panel, the **Monitor Control** cluster buttons select the group being output for monitor control. The monitor output is only available with the discrete audio option. Using the Monitor output, you can adjust the audio volume using the Volume knob in the center of the monitoring buttons cluster.

On the discrete outputs, you can Monitor A, B, C and D.

Monitor AES1 output allows you to listen to all four AES outputs (AES1 to AES4) by switching the A, B, C and D buttons. (A = AES1, B = AES2, C = AES3 and D = AES4). No movement of cables is required. When PST A, B, C, or D is selected, you will listen to the PST bus, and when PGM A, B, C, or D is selected, you will listen to PGM bus.

Monitor AES2, AES3, and AES4 outputs only allow you to listen to the selected output for PST or PGM.

PST and PGM Monitoring Control Locations

Figure 5-8 shows the locations of the different controls for monitoring PST and PGM.

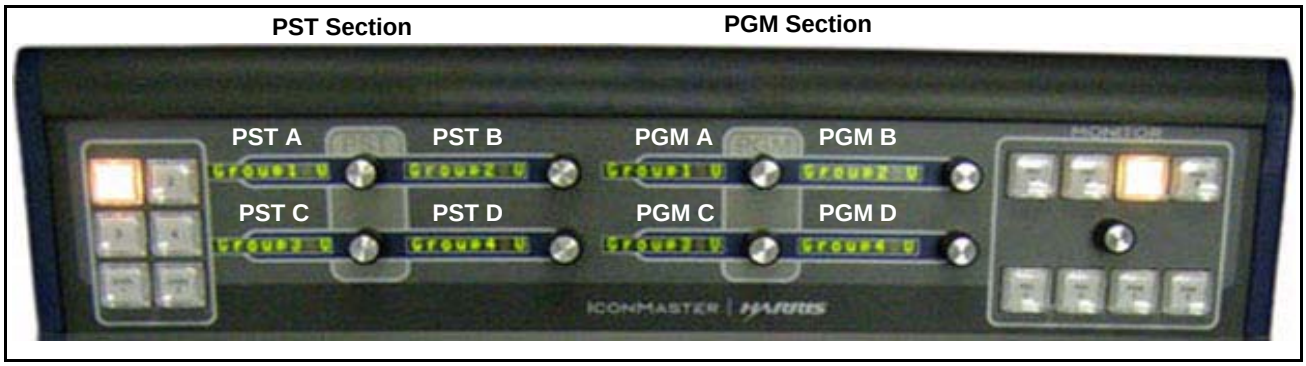


Figure 5-8. PST and PGM Monitoring Control Locations

When the **BKGD** button in the Transition Control cluster is not illuminated, the four PST LCD displays on the audio control panel will go dark and the four control pots will not function. This is a precautionary measure because, if you change the audio levels for the PST source, you will also change the audio levels for the PGM source (since the PST and PGM source is the same). You could inadvertently change the PGM audio without realizing it. You can change audio levels for the source through the audio control panel PGM controls.

Adjusting Audio Control Parameters

Figure 5-9. Parameter Adjustment Control Cluster

The Parameter Adjustment Control cluster is located in the center of the IconMaster main control panel. Use this cluster to adjust audio control parameters within the IconMaster system.

- For instructions on how to maneuver through the control parameters, see page 12.
- For a list of audio control parameters, see page 93.

Adjusting PST Selected Audio Input Parameters

Using the Audio Control, you can adjust the parameters of the current PST selected audio input. To enter the Audio Control menu, select **AUDIO** from the upper level menu list in the Control Cluster. Once **AUDIO** is selected, the following selections are available.

Note

AES 5-8, and channels 9 through 16 are only available when in HD or SD16 mode.

CAUTION

We recommend that these functions not be used to modify a source on-air.

INPUT allows you to access processing functions for primary audio inputs.					
	AES				
		AES 1 to **AES 8** applies the selection to an AES pair. (AES 5 - 8 are only available when in HD or SD16 mode.)			
			RESET menu		
				GAIN resets the gain of the selected AES pair.	
				PROC resets the processing of the selected AES pair.	
				ALL resets both the gain and processing of the selected AES pair.	
			PROC menu		
				NO LR returns the selected AES pair to normal mode of operation.	
				L-LR will assign the left channel to both the left and right channels for the selected AES pair. If this parameter is selected, the **SUM** and **SWAP** parameters cannot be used.	
				R-LR will assign the right channel to both the right and left channels for the selected AES pair. If this parameter is selected, the **SUM** and **SWAP** parameters cannot be used.	
				SUM physically adds the left and right channels within the selected AES pair and divides the total by 2, maintaining a relative signal gain. The result of the sum is copied to both channels with the AES pair, turning the stereo pair into a monaural output.	
				SWAP swaps the left and right channels with the selected AES pair.	
		EXIT			

	MONO				
		CH1 to **CH16** applies the selection to an individual channel within an AES pair. (channels 9 16 are only available when in HD or SD16 mode.)			
			PROC menu		
				REV inverts the audio phase at the input channel.	
				MUTE mutes the audio signal of each separate channel.	
			GAIN allows the adjustment of the audio source level from +12 dB to -108 db (silence)		
		EXIT goes back to the previous menu.			
	EXIT goes back to the previous menu.				
A/O 1 allows you to access the processing functions for the **Audio Over 1** input.					
	INPUT				
		CH1 to **CH2**			
			REV inverts the audio phase at the AES input.		
			MUTE mutes the audio signal of each separate channel.		
		EXIT goes back to the previous menu.			
	OUTPUT				
		AES			
			AES 1 to **AES 8** applies the selection to an AES pair (see page 85 for a description of AES pairs). (AES 5 - 8 are only available when in HD or SD16 mode.)		
				RESET menu	
					GAIN resets the gain of the selected AES pair.
					PROC resets the processing of the selected AES pair.
					ALL resets both the gain and processing of the pair.
				PROC menu	
					NO LR returns the selected AES pair to normal mode of operation.
					L-LR will assign the left channel to both the left and right channels for the selected AES pair. If this parameter is selected, the **SUM** and **SWAP** parameters cannot be used.

					R-LR will assign the right channel to both the right and left channels for the selected AES pair. If this parameter is selected, the **SUM** and **SWAP** parameters cannot be used.
					SUM physically adds the left and right channels within the selected AES pair and divides the total by 2, maintaining a relative signal gain. The result of the sum is copied to both channels with the AES pair, turning the stereo pair into a monaural output.
					SWAP swaps the left and right channels with the selected AES pair.
				EXIT goes back to the previous menu.	
			MONO		
				CH1 to **CH16** applies the selection to an individual channel within an AES pair. (CH 9 - 16 are only available when in HD or SD16 mode.)	
					GAIN allows the adjustment of the audio source level from +12 dB to -86 db (silence).
				EXIT goes back to the previous menu.	
			EXIT goes back to the previous menu.		
		EXIT goes back to the previous menu.			
A/O 2 allows you to access the processing functions for the **Audio Over 2** input.					
	INPUT				
		CH1 to **CH2**			
				REV inverts the audio phase at the AES input.	
				MUTE mutes the audio signal of each separate channel.	
			EXIT goes back to the previous menu.		
	OUTPUT				
		AES			
				AES 1 to **AES 8** applies the selection to an AES pair (see page 85 for a description of AES pairs).	
					RESET menu
					GAIN resets the gain of the selected AES pair.
					PROC resets the processing of the selected AES pair.
					ALL resets both the gain and processing of the pair.

				PROC menu	
					NO LR returns the selected AES pair to normal mode of operation.
					L-LR will assign the left channel to both the left and right channels for the selected AES pair. If this parameter is selected, the **SUM** and **SWAP** parameters cannot be used.
					R-LR will assign the right channel to both the right and left channels for the selected AES pair. If this parameter is selected, the **SUM** and **SWAP** parameters cannot be used.
					SUM physically adds the left and right channels within the selected AES pair and divides the total by 2, maintaining a relative signal gain. The result of the sum is copied to both channels with the AES pair, turning the stereo pair into a monaural output.
					SWAP swaps the left and right channels with the selected AES pair.
			EXIT goes back to the previous menu.		
		MONO			
			CH1 to **CH16** applies the selection to an individual channel within an AES pair.		
				GAIN allows the adjustment of the audio source level from +12 dB to -86 db (silence).	
			EXIT goes back to the previous menu.		
		EXIT goes back to the previous menu.			
	EXIT goes back to the previous menu.				
AO RAT					
	A/O 1 and **A/O 2** (0% to 100%) allows you to separately adjust the proportions of the audio over and background for each of the audio overs. The ratio setting of 0 means that the selected program background source is fully “on” and the audio over source contributes nothing to the actual output. Alternatively, the ratio setting of 100 means that the selected program background source is fully “off” and the audio over source contributes everything to the actual output.				
EXIT takes you back to the previous menu.					

Changing Audio Gains through the Fast Reset Function

Note

For **PROC** audio input parameters to be reset, you must select **Audio Gain + Proc** as your Fast Reset behavior in ICU. See page 184 for more information.

The Fast Reset function allows you to quickly reset audio gain and/or **PROC** audio input parameter settings for an IconMaster input source or an Audio Over. The reset values can be either a factory reset values (0 dB gain), or can be user-saved reset values, which are saved on a source-by-source basis for audio gains. (The selection to reset audio gains alone, or audio gains + **PROC** settings, are configured in ICU.) If the audio control panel is displaying **OVER** ratios, there will be no reset functionality.

There are three separate operations that are enabled in the Parameter Adjustment Control cluster when the **Fast Reset** button is pressed: **SET**, **CLEAR**, and **RECALL**.

Figure 5-10. Fast Reset Operations

- **SET operations**: If the **SET** function is enabled, the parameter will not be reset, but its current value will be saved as the source's user-saved reset value. This is the value that will be used during a **RECALL** operation. See "Setting Audio Gains" on page 99 for instructions on how to perform this operation. To clear the user-saved values, use the **CLEAR** operation.
- **CLEAR operations**: If the **CLEAR** function is enabled, the user-saved reset value will be cleared (back to factory value), and the keyer's parameters will also be reset back to this factory value. See "Clearing Audio Gains" on page 101 for instructions on how to perform this operation.
- **RECALL operations:** If the **RECALL** function is enabled, the user-saved reset value set up through a **SET** operation will be applied. If a user-saved reset value has not been set, the factory values will be recalled and applied. See "Recalling Audio Gains" on page 100 for instructions on how to perform this operation.

  The **RECALL** function is the default operation enabled when the **Fast Reset** button is pressed.

Setting Audio Gains

To set a particular audio gain:

1. Select the audio channel control you want to set.

   The actual audio channels affected will depend upon which of the upper left buttons (clusters, AES Pairs, or Mono Gains) is currently enabled and which channels are displayed in the audio control panel gain displays.

   If you select clusters, all audio channels assigned to that cluster will be set. If you only want to set selected audio gains, select the appropriate AES Pairs or Mono Gains.

2. Using the gain control knobs, select the gain you want for set each audio channel control.
3. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.

4. While holding the **FAST RESET** button, press the **SET** button. The LCD display button will change from green to orange. Keep the **FAST RESET** button pressed.
5. Press the corresponding audio gain knob whose settings you want to save as the user-saved values.
6. Release the **FAST RESET** button. The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

To set all audio gains for a source:

1. Using the gain control knobs, select the gain you want for set each audio channel control.
2. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.

3. While holding the **FAST RESET** button, press the **SET** button. The LCD display button will change from green to orange. Keep the **FAST RESET** button pressed.
4. Press a source in the **PGM** or **PST** bus.

   Pressing any of the source selection buttons will reset all audio gains for the selected source; that is, cluster gains, **AES PAIR** gains, and **MONO CHAN** gains. If Proc-Resets are enabled (through ICU), all **PROC** audio input parameter settings (sum/swap/mono, phase reverse, etc.) will also be reset.

5. Release the **FAST RESET** button. The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Recalling Audio Gains

To recall a particular audio gain:

1. Select the audio channel control you want to recall.

   The actual audio channels affected will depend upon which of the upper left buttons (clusters, AES Pairs, or Mono Gains) is currently enabled and which channels are displayed in the audio control panel gain displays.

   If you select clusters, all audio channels assigned to that cluster will be changed. If you only want to change selected audio gains, select the appropriate AES Pairs or Mono Gains.

2. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.

3. While holding the **FAST RESET** button, press the **RECALL** button. The LCD display button will change from green to orange. Keep the **FAST RESET** button pressed.

4. Press the corresponding audio gain knob whose settings you want to recall.

5. Release the **FAST RESET** button. The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

To recall all audio gains for a source:

1. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**.

2. While holding the **FAST RESET** button, press the **RECALL** button. The LCD display button will change from green to orange. Keep the FAST **RESET** button pressed.

3. Press a source in the **PGM** or **PST** bus.

   Pressing any of the source selection buttons will reset all audio gains for the selected source; that is, cluster gains, AES Pair gains, and Mono Chan gains. If Proc-Resets are enabled (through ICU), all **PROC** audio parameter settings (sum/swap/mono, phase reverse, etc.) will also be reset.

4. Release the **FAST RESET** button. The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Clearing Audio Gains

To clear a particular audio gain:

1. Select the audio channel control you want to clear.

   The actual audio channels affected will depend upon which of the upper left buttons (clusters, AES Pairs, or Mono Gains) is currently enabled and which channels are displayed in the audio control panel gain displays.

   If you select clusters, all audio channels assigned to that cluster will be cleared. If you only want to clear selected audio gains, select the appropriate AES Pairs or Mono Gains.

2. Press and hold the **FAST RESET** button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**, with the **RECALL** operation selected by default.

3. While holding the **FAST RESET** button, press the **CLEAR** button. The LCD display button will change from green to orange. Keep the **FAST RESET** button pressed.

4. Press the corresponding audio gain knob.

5. Release the **FAST RESET** button. The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

To clear all audio gains for a source:

1. Press and hold the Fast Reset button in control cluster 2. (See Figure 1-1 on page 2 for the location of this control cluster.)

   The LCD display buttons on the Parameter Adjustment Control cluster will display **SET**, **CLEAR**, and **RECALL**.

2. While holding the **FAST RESET** button, press the **CLEAR** button. The LCD display button will change from green to orange. Keep the **FAST RESET** button pressed.

3. Press a source in the **PGM** or **PST** bus.

   Pressing any of the source selection buttons will reset all audio gains for the selected source; that is, **CLUSTER** gains, **AES PAIR** gains, and **MONO CHAN** gains. If Proc-Resets are enabled (through ICU), all **PROC** audio input parameter settings (sum/swap/mono, phase reverse, etc.) will also be reset.

4. Release the **FAST RESET** button. The LCD display buttons on the Parameter Adjustment Control cluster will return to their previous settings.

Audio Control (Software Control Panels)

When you press **Audio Control** under Dynamic Page Controls, the sub-panel that appears has three buttons at the top. The selected button will determine the controls available on the rest of the sub-panels. These three buttons are:

- “Audio LEVELS” on page 102
- “Audio Pair Proc” on page 103
- “Audio Mono Proc” on page 105

Audio LEVELS

Note

A cluster is an arbitrary grouping of audio channels. A cluster could be composed of audio from different channels. For information on creating audio clusters, see “Audio Clusters Dialog Box” in your *IconMaster Master Control Switcher Configuration Utility Software Reference Guide*.

When you press **Audio LEVELS** under **Audio Controls**, the following sub-panel appears:

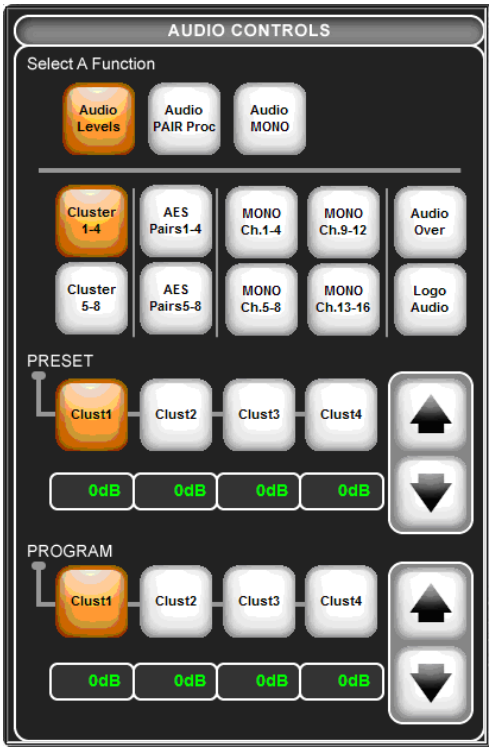


Figure 5-11. Cluster Control Sub-Panel

Audio output gain is adjustable for the Preset and Program buses only, and is controlled as a group.

To adjust the audio output gain on a specific cluster:

1. Press the cluster or group of audio channels you wish to adjust.

   In both the **Program** and **Preset** sections of the screen, the buttons update to indicate the audio channels associated with that bus.

   The **Gain** field below each button updates to reflect the actual gain of that cluster, which it retrieves from the IconMaster master control switcher.
2. Select a button within the Program or Preset group.
3. Use the **Up** and **Down** buttons to adjust the gain.

Your changes take effect immediately.

Audio Pair Proc

When you press **Audio Control** under Dynamic Page Controls, the following sub-panel appears:

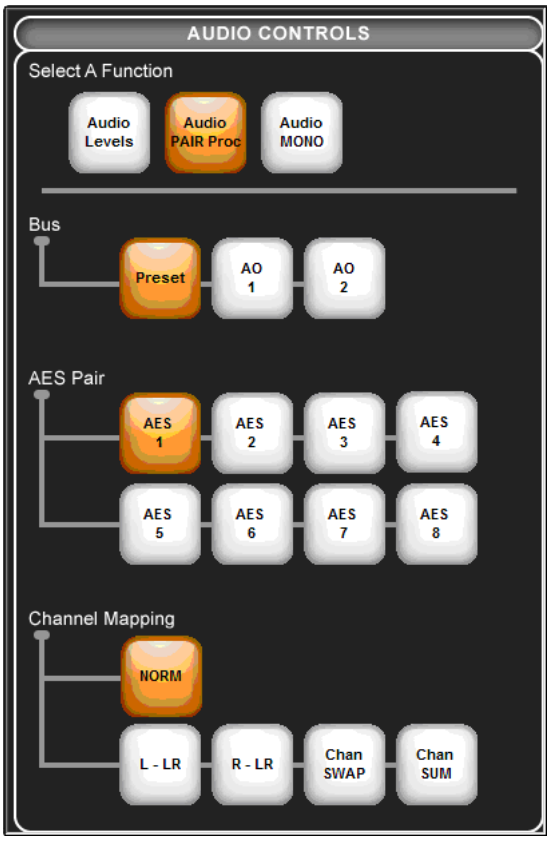


Figure 5-12. Audio Pair Proc Sub-Panel

To map audio functions for the Preset and the two Audio-Over sources, and to control AES channel groupings:

1. Press **Preset**, **Audio Over 1**, or **Audio Over 2**.

   The labels on the **AES pairs** update to indicate the pairs that are currently mapped for that source.

2. Press one of the eight **AES PAIR** buttons.
3. Press the **Channel Mapping** option to assign to that AES pair.

   The options are outlined in the following table:

Table 5-3. Channel Mapping Options

Button	Function
NORM	Left channel input goes to left output, and right input goes to right output
L to LR	Left channel input goes to both left and right channel outputs
R to LR	The right channel input goes to both left and right channels' outputs
Chan Swap	Swaps the left and right channels within the selected pair so the left input goes to the right output and right input goes to left output
Chan Sum	Adds the left and right channels within the selected AES input and divides the total by two, maintaining a relative signal gain; then, it copies the result to both channels within the AES pair, turning the stereo input pair into a mono output

The changes you make take effect immediately to the PST audio.

These same mapping options are available in the IconMaster master control switcher's Control Cluster **Audio** menu. For more information, see "Navigating the Audio Control" in your *IconMaster Master Control Switcher Installation and Operation Manual*.

Audio Mono Proc

When you press **Mono Control** under Audio Control, the following sub-panel appears:

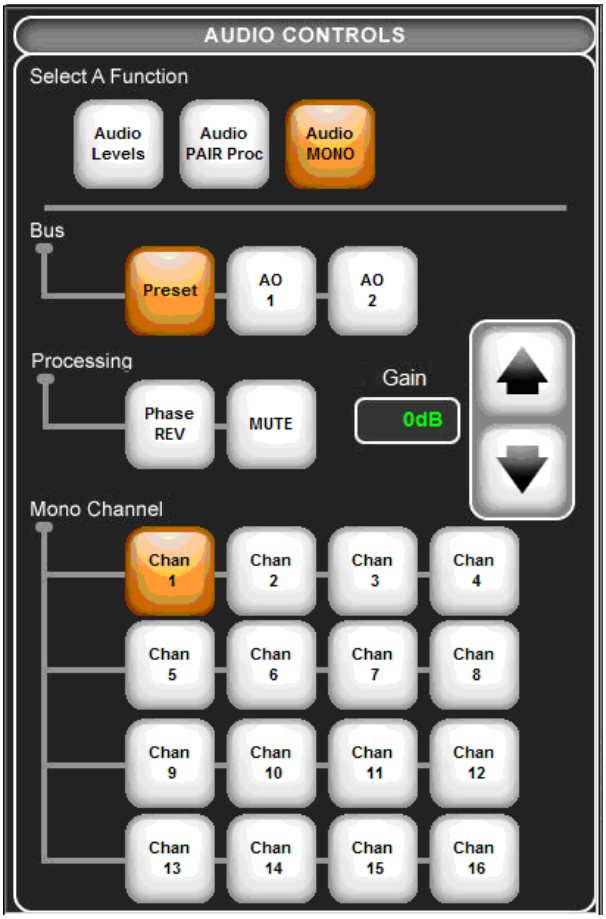


Figure 5-13. Mono Control Sub-Panel

Mono control functions are available for the Preset and the two Audio-Over sources, To configure the processing for a mono channel:

1. Press **Preset**, **Audio Over 1**, or **Audio Over 2**.

   The channels mapped for that source appear on the 16 buttons below the **Mono Channels** heading.

   When **Audio Over 1** or **Audio Over 2** is selected, the Phase and mute buttons are not available.

2. Press a **Channel** button, and to configure that channel, do one of the following:

   - Press **Phase Rev** to invert the polarity of the selected audio channel.
   - Press **Mute** to turn off the audio of the selected audio channel.

The changes you make take effect immediately to the PST audio.

Chapter 6

Configuring IconMaster Software Control Panel

Overview

The IconMaster Software Control Panel (ISCP) license and IconMaster Software Control Panel-LITE (ISCP-LITE) license create software control panels that replicate or complement the functionality of the IconMaster Hardware Control Panel and can be used to control and monitor the IconMaster server hardware.

The ISCP operates as a control panel for the IconMaster Master Control Switcher. It is configured by an administrator user in Build mode, usually on a Navigator Server, and then is operated in Control mode, usually on a Navigator Client. This relationship means that various computers can share the same ISCP interface, as well as other control interfaces for other products.

ISCP and ISCP-LITE are configured in a similar manner, and are described in common. Specific exceptions for the ISCP-LITE are noted.

This chapter contains the following topics:

- "Required Hardware, Operating System and Software" on page 108
- "Installing the Software" on page 109
- "Logging On and Setting the Operational Mode" on page 109
- "Enabling a Navigator License" on page 111
- "IconMaster Software Control Panel (ISCP)" on page 113
- "Configuration Overview" on page 114
- "Defining Master Control Channels (ISCP)" on page 115
- "Creating an ISCP Master Control Panel" on page 119
- "Operating IconMaster Software Control Panel" on page 129
- "Displaying the ISCP or ISCP-LITE" on page 130
- "Dynamic Page Control Buttons" on page 133

Required Hardware, Operating System and Software

When configuring the IconMaster Software Control Panel, you will need to meet the Navigator Server hardware and software requirements. To operate the panel, only the Navigator Client system requirements need to be met.

The other hardware, operating system and software minimum system requirements are the same as those for Navigator. For a complete list of requirements, see the “Installation” chapter of your accompanying *Navigator: Advanced Graphical Navigation Application User Guide*.

Hardware Requirements

Install the ISCP software on a PC that meets or exceeds the following hardware requirements:

Table 6-1. System Requirements for Navigator Clients and Servers

	Client	**Server**	
	Minimum Supported Requirements	**Minimum Supported Requirements**	**Recommended Requirements for Optimal Performance**
Processor	3 GHz Pentium IV processor	3 GHz Pentium IV processor	Core 2 Duo - 2.39 Ghz
System Memory	1 GB RAM	1 GB RAM	2 GB RAM
Network Connection	100-BaseT	100-BaseT	100-BaseT
HDD Drive	20 GB	40 GB	40 GB
Available Disk Space	1 GB	5 GB	5 GB
Optical Drive	DVD-ROM Drive	DVD-ROM Drive	DVD-ROM Drive
Display	Super VGA supporting 1280 x 1024 (19-inch recommended)	Super VGA supporting 1280 x 1024 (19-inch recommended)	Super VGA supporting 1280 x 1024 (19-inch recommended)

It is not recommended to run Navigator Server on a system that is running or hosting other applications or servers. If Navigator Server is installed remotely, the clients should connect to the server through VPN, which offers a layer of protection.

IconMaster software Control Panel was designed for use with a touch screen of at least 19” and 1280 × 1024. ISCP-LITE is designed for use with a touch screen of at least 17: and 1024 × 768.

Installing the Software

To install the CCS Navigator IconMaster Software Control Panel, complete these steps:

1. Close all other applications running on the PC and insert the Installation CD into the PC CD-ROM drive.

   The setup program automatically runs when the drive closes.
2. When the CCS Navigator **Welcome** box appears, click **Continue**.
3. When the unpacking process finishes, another **Welcome** box appears. Exit all Windows programs, read the instructions in the **Welcome** box, and then click **Next>**.
4. Follow the instructions that appear on the screen.

If you do not have all the required software that is needed to run Navigator, the installation may abort. All the required software is included on the Navigator installation CD. Once the required software is installed, start your Navigator installation again.

Logging On and Setting the Operational Mode

For the first login after an installation or reinstallation of CCS Navigator, the **User Name** box will show the name `Administrator`. At subsequent logins, the **User Name** box will show the name of the person who last logged on.

Logging On

To start CCS Navigator, complete these steps:

1. Find the CCS Navigator application icon in Windows Explorer and double-click the icon.

   Note

   By default, a new CCS Navigator installation has no password. However, if you are upgrading from CCS Navigator 1.0, the default password is *Leitch*.=

   Or click **Start**, point and click on **Programs** > **Leitch Navigator [VersionNo.]**. *VersionNo.* represents the CCS Navigator software version number.
2. When the **Logon** box appears, perform one of these actions:

- If you are logging on as a User, enter your assigned user name. (You do not need to re-enter your user name if it already appears.)

Note

For more information on administrative and log-in permissions, see your *Navigator: Advanced Graphical Navigation Application User Manual*, available on the installation CD as a PDF file.

- If you are logging on as an Administrator user, type

  `Administrator`

- If you are logging on as a Support user, type

  `Support`

3. Tab to the **Password** box, and then type in the password. (Passwords are case-sensitive.)
4. Click **Log On**.

Setting the Operational Mode

Note

Navigator Client installations have Control mode only.

CCS Navigator has two operational modes, as described in Chapter Four of your accompanying *Navigator: Advanced Graphical Navigation Application User Manual* (available as a PDF on your installation CD). Panel creation requires CCS Navigator to be in Build mode, and operating the panels requires Control mode.

To set CCS Navigator's mode, from the main menu, point to **File > Operational Mode**, and then click on either **Build** or **Control**.

Enabling a Navigator License

Note

Before you can enable the Navigator ISCP or ISCP-LITE option, you must obtain a license key. You will need to provide the Customer Service representative with your Navigator license serial number.

For instructions on installing and using CCS Navigator, refer to the *Navigator User Manual*, available on the Navigator-Trial DVD.

When you install the CCS Navigator software application, it will automatically start with a 30-day free license with all options available. When this temporary license expires, unless you purchase an ISCP license, your Navigator installation will revert to Build mode only. No Control mode functionality will be available. If your license is temporary, you will see a notification on the bottom of the splash screen during logon. This notification will indicate the number of days remaining before your license expires.

To acquire a license key, see “Adding a License Key” on page 112.

Viewing Your License Options

To view your license information in Build or Control mode, choose **Help** → **License** from the main menu.

Items for which there is a license will display **Enabled** in the **Status** field. Items for which no license is available will display **Disabled**. If your PC has a temporary license, the duration of that license is displayed.

The number of days remaining in a temporary license are displayed on the splash screen during Navigator startup.

Adding a License Key

To add a new license:

1. In Build mode, choose **Help** → **License** from the main menu. The License dialog box will appear.

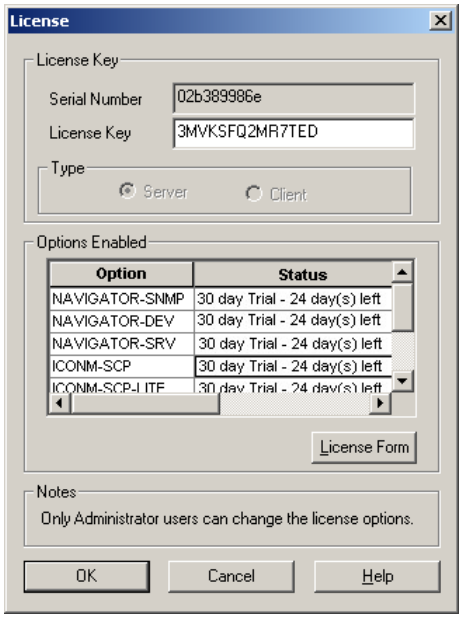


Figure 6-1. License Dialog Box

2. Provide the serial number from the License dialog box to your Sales representative.

   There are two ways to provide the serial number and receive your license key:

   - By phone: Contact your Sales representative.
   - By faxing or mailing a form to Harris: This form is available by clicking License Form. The form includes information on where it should be sent. (Acrobat Reader is required.)

3. Enter the provided key in the License Key field.

   Your ISCP or ISCP-LITE license should be recognized immediately. A restart of Navigator or the PC is not required.

IconMaster Software Control Panel (ISCP)

The ISCP is ideal for use with a touch-screen monitor, and is designed to ideally fit a 19” screen with 1280× 1024 resolution. Figure 6-2 shows a typical ISCP interface.

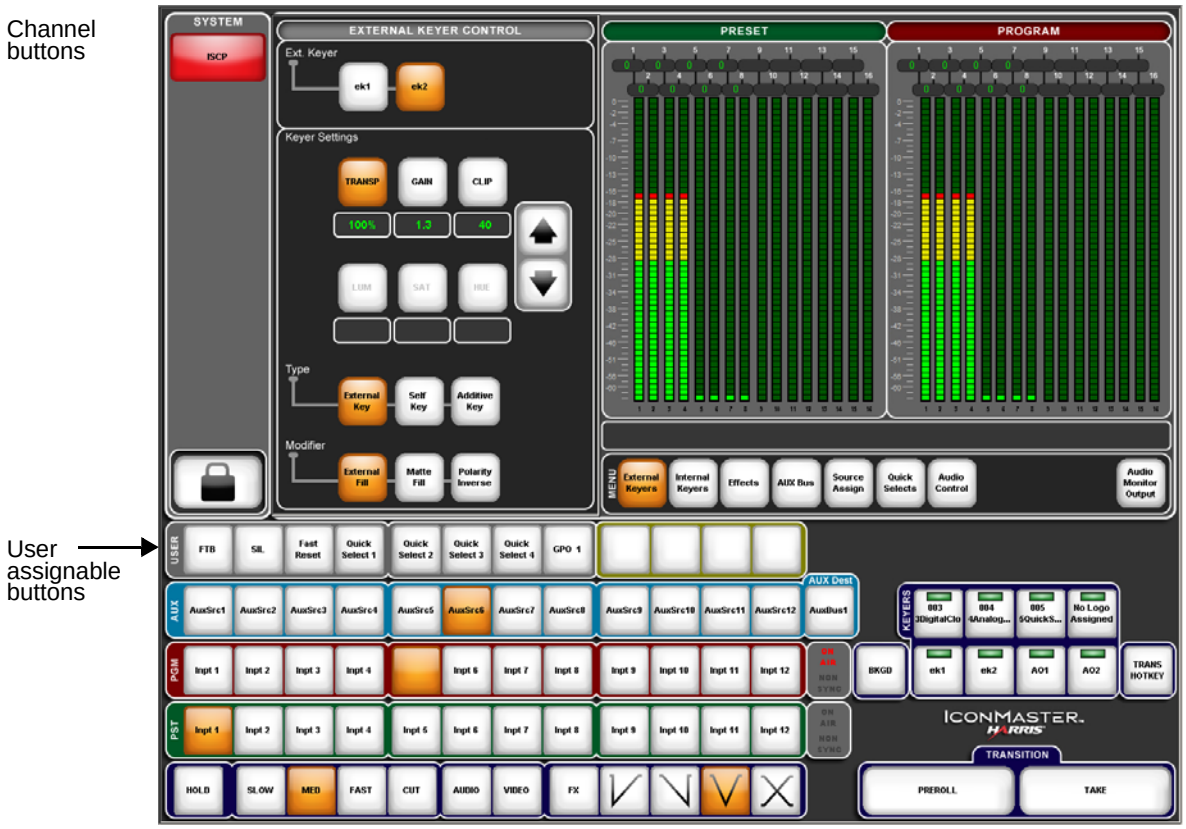


Figure 6-2. IconMaster Software Control Panel Interface

The functionality for the ISCP matches the functionality of the hardware control panel, with the following modifications:

- The ISCP will update the name of a bus when it changes its function; for example, when you switch the Aux bus
- Button labelling on the ISCP is dynamic, meaning that button names update themselves when, for example, the inputs to those buttons are changed

The IconMaster Software Control Panel (ISCP) is not a fully-featured version of Navigator. To use some features described in the Navigator manual, you must purchase separate Navigator licenses after the 30-day trial period.

ISCP-LITE

The ISCP is designed for use with a 17” touch-screen monitor with 1024 × 768 resolution. Figure 6-2 shows a typical ISCP-LITE interface.

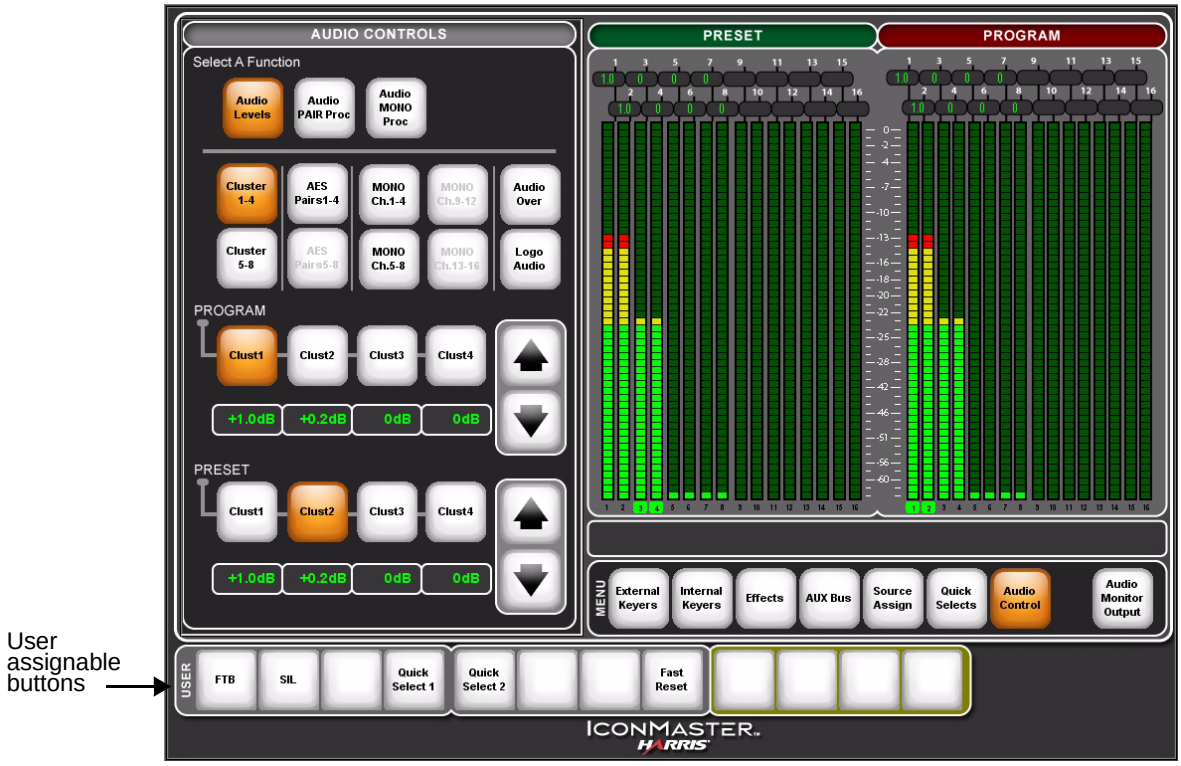


Figure 6-3. IconMaster Software Control Panel Interface

The ISCP-LITE is only to be used in conjunction with a paired IconMaster Hardware Control Panel.

Configuration Overview

Note

Only an Administrator user on a Navigator Server can create IconMaster Software Control Panel pages.

ISCP configuration is a Build mode operation that involves creating graphical (or “soft”) control panels for master control frames.

Before you can configure your ISCP or ISCP-LITE, you will use the **Master Control Plug-in** tool to enter the IP address and channel name for each IconMaster channel or control panel connected to the system.Within ISCP, each master control switcher is referred to as a channel. ISCP-LITE does not associate withan IconMaster channel. Instead it is associated with the control panel physically co-located with the ISCP-LITE touch screen. See “Defining Master Control Channels (ISCP)” on page 115.

Once your channels are defined, using the wizard, you can create a master control panel, which provides switching and audio monitoring information for the selected channel and a series of sub-panels for operating commonly used areas of your IconMaster master control switcher. See “Creating an ISCP Master Control Panel” on page 119.

Defining Master Control Channels (ISCP)

Before controlling IconMaster devices using the ISCP, Navigator needs to know each channel’s name and IP address. This procedure can be done with the MKEs already configured, or the MKEs can be configured separately. However, you do need to know the IP addresses of the MKE modules. You must be in Build mode to create channels.

1. Click **Options** > **Plug-ins** in the main menu.

   The **Plug-ins** dialog box opens.

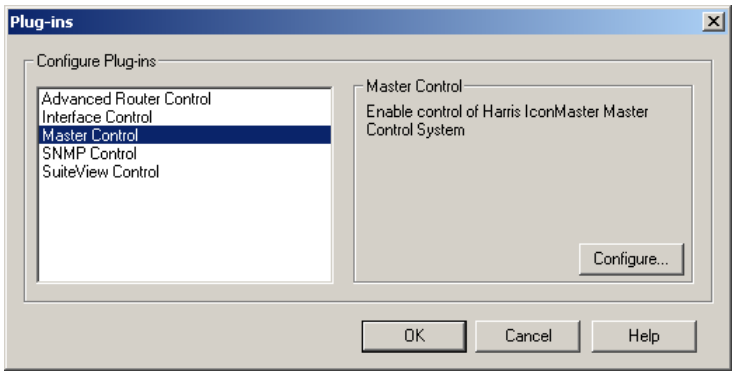


Figure 6-4. Plug-ins Dialog Box

2. Click **Master Control** in the **Configure Plug-ins** list and then click **Configure...**

   The **IconMaster Control Configuration** dialog box opens.

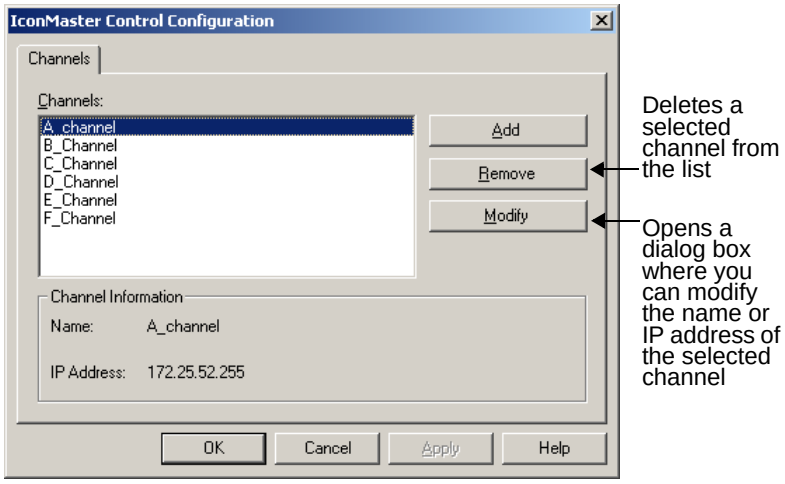


Figure 6-5. IconMaster Control Configuration Dialog Box

3. Click **Add**.

   The **Add Channel** dialog box opens.

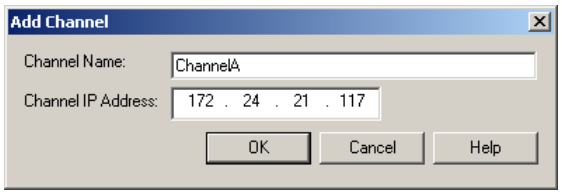


Figure 6-6. Add Channel Dialog Box

4. Beside **Channel Name**, type a descriptive name.
5. Enter the IconMaster MKE-3901 Module's IP address.
6. Click **OK** to close the dialog box, and then **OK** to close the **Plug-ins** dialog box.

You can now create master control soft panels. See "Creating an ISCP Master Control Panel" on page 119.

Associating a Hardware Control Panel (ISCP-LITE)

Before controlling IconMaster devices using the I ISCP-LITE, Navigator needs the IP address of the associated hardware control panel.

1. With CCS Navigator in Build mode, click **Options** > **Plug-ins** in the main menu.

   The **Plug-ins** dialog box opens.

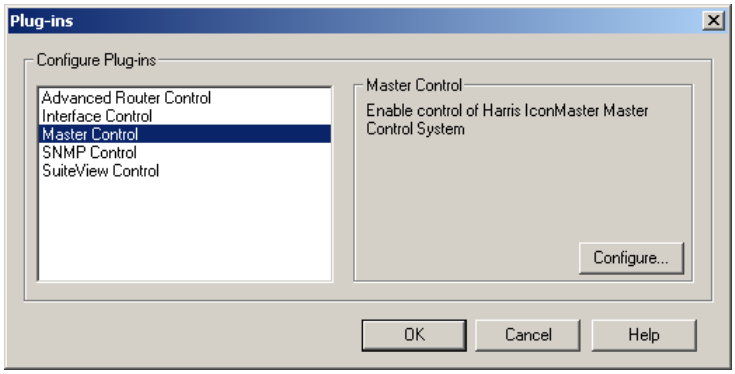


Figure 6-7. Plug-ins Dialog Box

2. Click **Master Control** in the **Configure Plug-ins** list and then click **Configure...**

   The **IconMaster Control Configuration** dialog box opens.

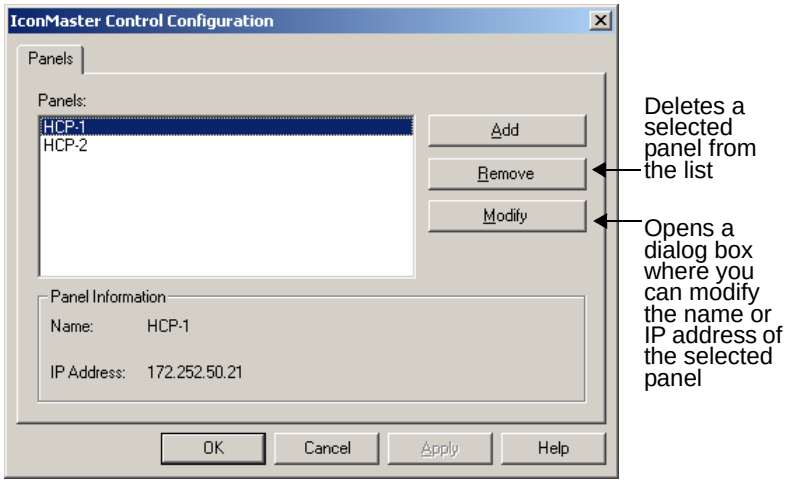


Figure 6-8. IconMaster Control Configuration Dialog Box

3. Click **Add**.

   The **Add Channel** dialog box opens.

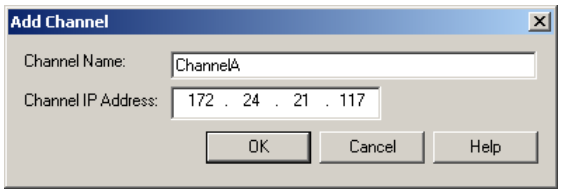


Figure 6-9. Add Channel Dialog Box

4. Beside **Channel Name**, type a descriptive name.
5. Enter the RCP IP address of the HRCP associated with the ISCP-LITE installation.
6. Click **OK** to close the dialog box, and then **OK** to close the **Plug-ins** dialog box.

You can now create master control soft panels. See “Creating an ISCP Master Control Panel” on page 119.

Creating an ISCP Master Control Panel

After completing the steps in “Defining Master Control Channels (ISCP)” on page 115, while still in Build mode, you can use a wizard to create new IconMaster Software Control Panels.

Note

Only an Administrator user on a Navigator Server can create ISCP pages.

To create an IconMaster soft control panel:

1. With Navigator in Build mode, select **File** > **New...**.

   The **Navigator New Page Wizard** opens.

2. Click the **Master Control** tab.

   The box now shows the format options for the new Master Control panel and includes a preview of the selected layout option.

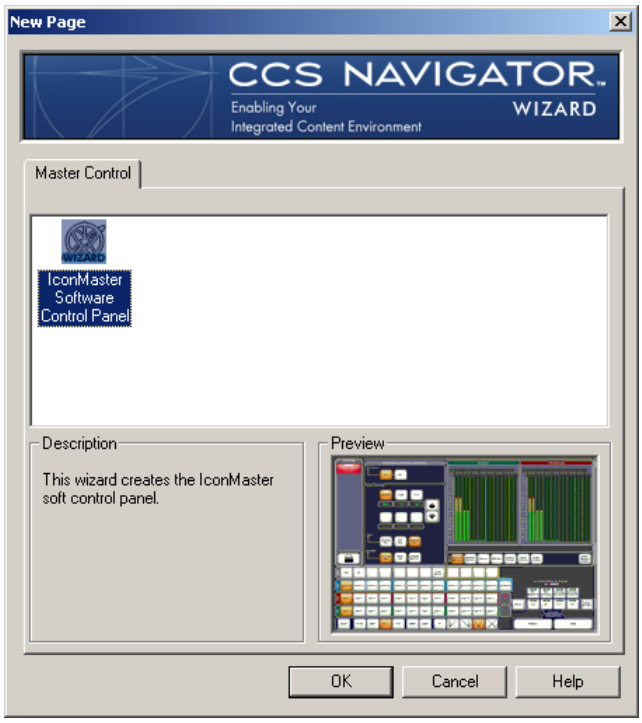


Figure 6-10. Master Control Tab of the New Page Wizard

3. Click **IconMaster Software Control Panel**, and then click **OK**.

   In the **Step 1 of 4** page of the **Page Wizard**, select the channel(s) that you want to have controlled by the panel. You can select up to eight MKEs (channels) for the panel to control.

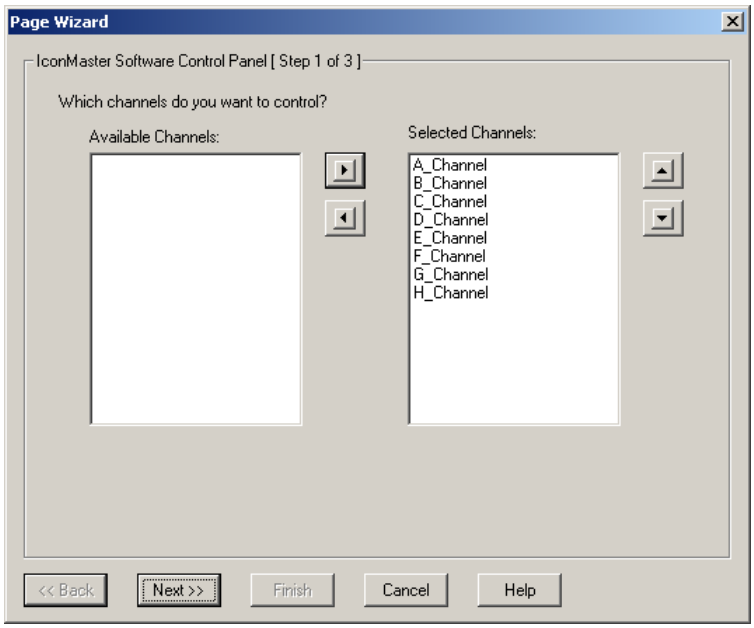


Figure 6-11. IconMaster Wizard—Step 1 of 4

Use the left and right arrows to move the channel to and from, and the up and down arrows to shift the vertical position of the selected channel within the selected box. The buttons will appear in this order from top to bottom on the IconMaster Software Control panel.

4. Click **Next**.

   On the **Step 2 of 4** screen, you can associate a CENTRIO profile with each IconMaster channel. Then, when you switch channels on the ISCP, the CENTRIO will load the layout selected on this screen.

   In order to associate a CENTRIO layout with a channel, you must know the name of the profile. CENTRIO profiles are created using the IconMaster Configuration Utility. A profile consists of the IP address, layout name, UMD name, and CENTRIO name.

   If you do not assign a profile to a particular channel, when you operate the ISCP and switch to that channel, the CENTRIO will retain the layout that is already loaded. Profiles can be added, removed or changed after the ISCP panel has been created. See “Changing User-Configurable Button Assignments” on page 124.

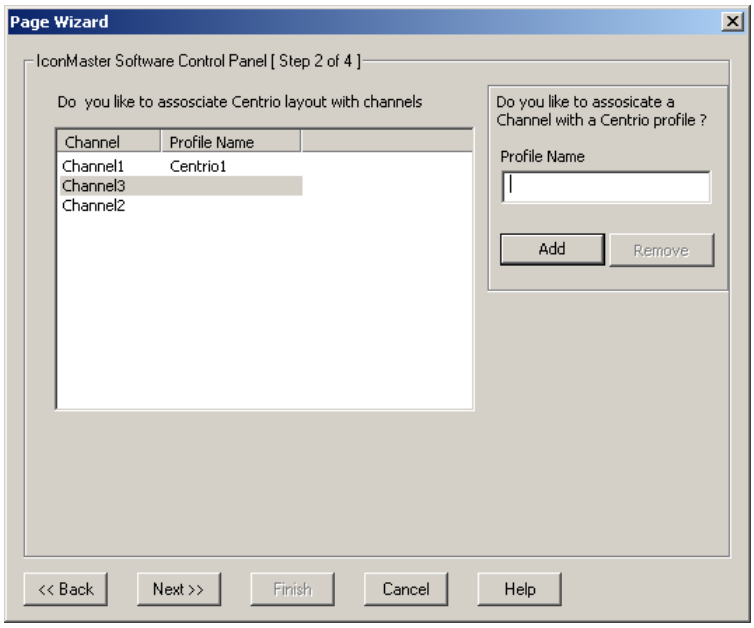


Figure 6-12. Associating CENTRIO Layouts With Channels

5. To associate a CENTRIO layout to a channel, click the channel.

   The selected channel is highlighted.

6. In the Profile field, type the name of the profile you want to load, and then click **Add**.

   The CENTRIO data is added in the table on the left of the screen.

   You must type the exact name of the profile. Profile names are case-sensitive.

7. Click **Next**.

   On the **Step 3 of 4** screen, you can assign functions to the user-configurable buttons on the ISCP. See Figure 6-2 on page 113 for the location of the user-configurable buttons.

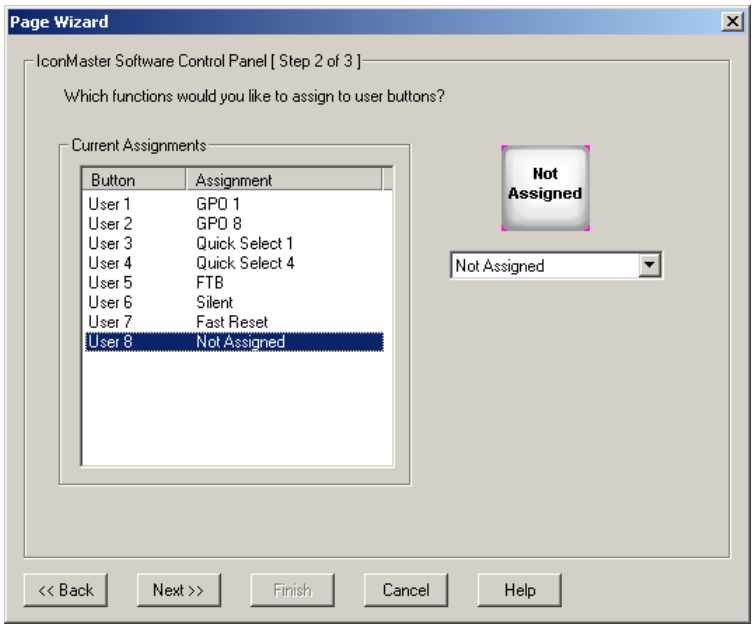


Figure 6-13. IconMaster Wizard—Step 3 of 4

8. Click on the button in the **Current Assignments** table, and then choose an assignment from the menu.

   Options include:

   - **GPO 1-13**, **Ext-1 GPO - 24**, and **Ext-2 GPO 1 - 24** (General Purpose Output Control) The button will trigger a specific GPO
   - **Quick Select 1-8** Causes the recall of the previously stored combination of function attributes
   - **FTB** (fade to black) Causes the video program outputs to immediately fade to black
   - **Silent** Causes the audio program outputs to immediately fade to silence
   - **Fast Reset** Quickly resets **PST** or **PGM** source audio gains, audio over gains, keyer settings, individual AES gains, individual audio cluster gains, and mono channel gain

9. Click **Next** to open the **Step 4 of 4** page of the wizard.

   Here you are able to select the name for your control panel.

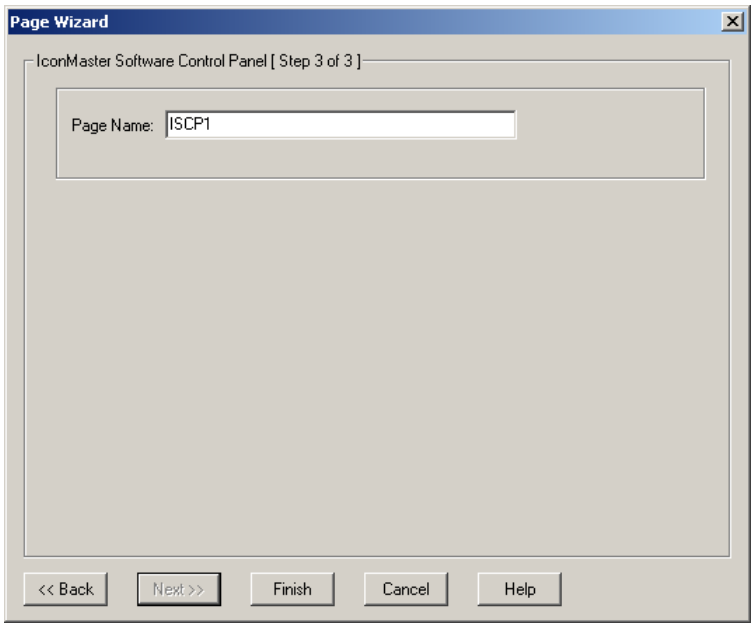


Figure 6-14. IconMaster Wizard—Step 4 of 4

   By default, the page is named after the Routermapper database.

10. (Optional) Type a new name beside **Page Name**.
11. Click **Finish**. The panel is created.

After you switch to Control mode, you can use the IconMaster Software Control Panel.

Adjusting a Configuration

Once created, you can make the following changes to an ISCP (changes must be done in Build mode):

- “Changing User-Configurable Button Assignments” on page 124
- “Reconfiguring Channels and Changing CENTRIO Layout Assignments” on page 125

Changing User-Configurable Button Assignments

To revise the function of a user-configurable button, while in Build mode:

1. Right-click on the button that you want to change on the ISCP page, and choose **Component Wizard** from the context menu.

   The **Component Wizard** for that button opens.

   A button's component wizard is the same as Figure 6-13 on page 122, with only the selected button.

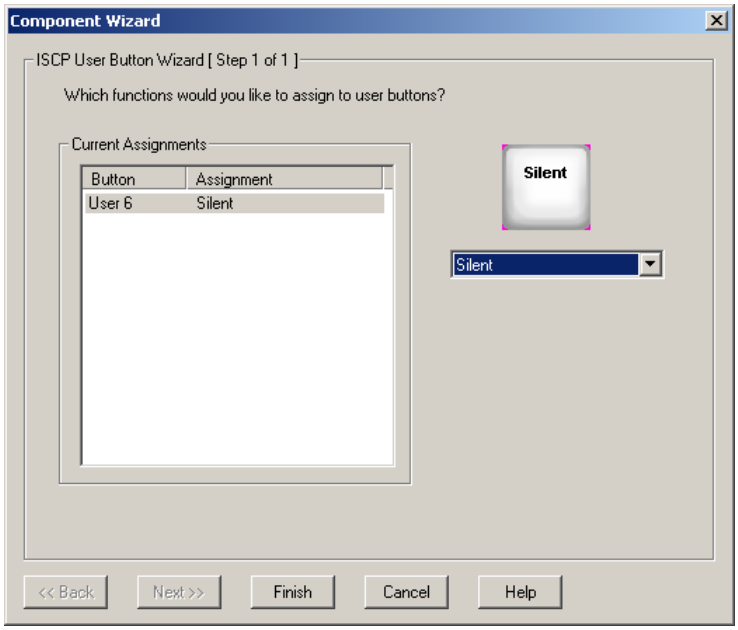


Figure 6-15. Component Wizard for User Button 6

2. Choose an item from the drop-down menu.
3. Click **Finish**.

The text on the selected button is updated.

Note that you have to open the **Component Wizard** for each button you want to change.

Reconfiguring Channels and Changing CENTRIO Layout Assignments

Use the Component Wizard to add or subtract channels from an open ISCP in Build mode, or change the CENTRIO Layout that loads when you select a channel.

1. Right-click on a channel and choose **Component Wizard** from the context menu.

   The **Component Wizard** appears.

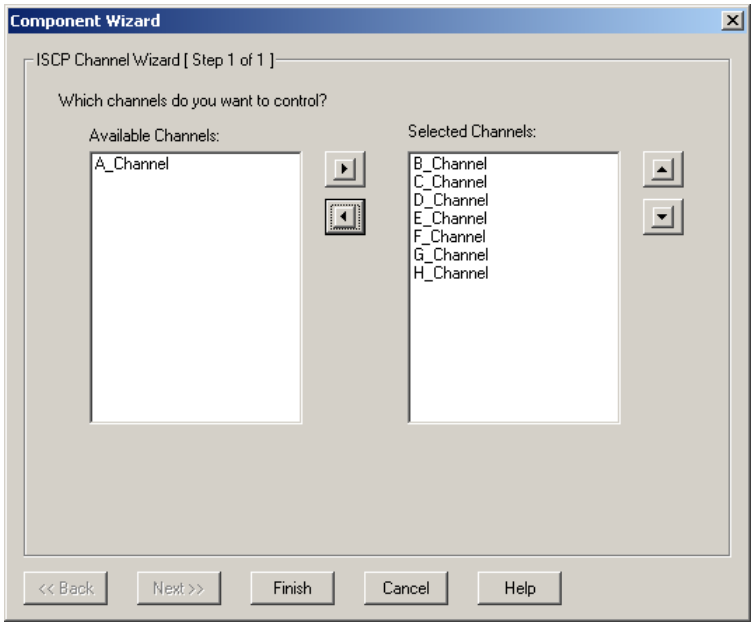


Figure 6-16. Component Wizard for Channels

2. On the **Step 1 of 2** screen, use the left and right arrows to move the channel to and from, and the up and down arrows to shift the vertical position of the selected channel within the selected box.
3. Click **Next**.
4. On the **Step 2 of 2** screen, click a channel.

   The Layout field updates to display the CENTRIO layout that is assigned to that channel. The selected channel is highlighted.
5. In the **Profile** field, type the name of the profile you want to load, and then click **Add**.

   The CENTRIO data is added beside the appropriate channel in the table on the left of the screen.

   Profile names are case-sensitive. You must type the profile name exactly.
6. Click **Finish** to close the Component Wizard.

The column of channel buttons updates to reflect the changes you have made.

Creating an ISCP-LITE Master Control Panel

After completing the steps in “Defining Master Control Channels (ISCP)” on page 115, while still in Build mode, you can use a wizard to create new IconMaster Software Control Panels.

Note

Only an Administrator user on a Navigator Server can create ISCP pages.

To create an IconMaster soft control panel:

1. With Navigator in Build mode, select **File** > **New...**.

   The **Navigator New Page Wizard** opens.

2. Click the **Master Control** tab.

   The box now shows the format options for the new Master Control panel and includes a preview of the selected layout option.

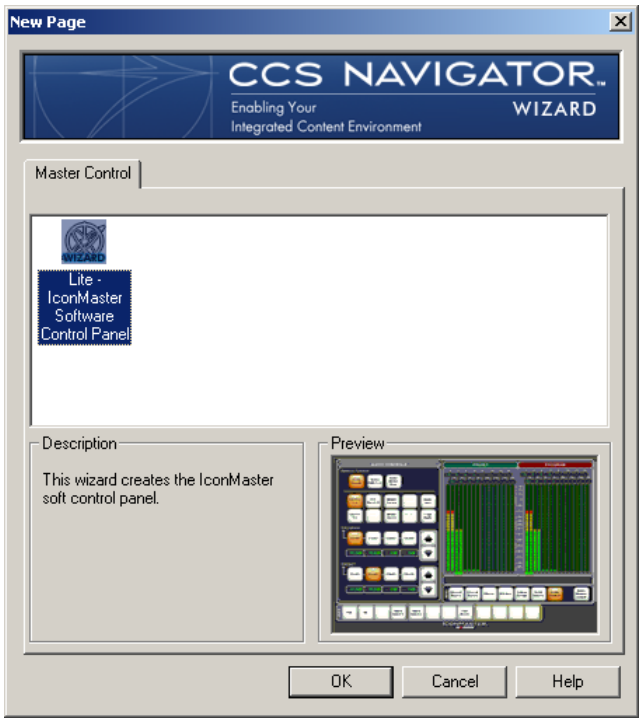


Figure 6-17. Master Control Tab of the New Page Wizard

3. Click **Lite - IconMaster Software Control Panel**, and then click **OK**.

In the **Step 1 of 3** page of the **Page Wizard**, select a HRCP for the ISCP-LITE to be associated with.

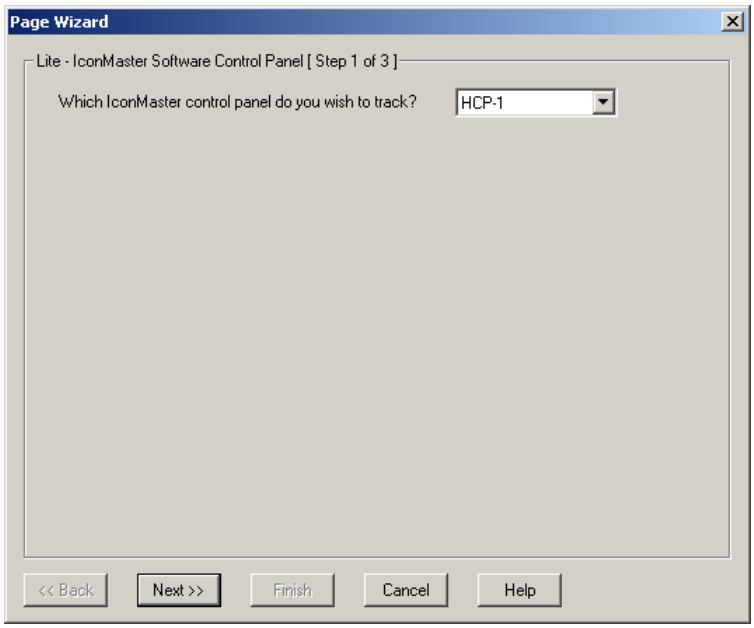


Figure 6-18. IconMaster Wizard—Step 1 of 3

4. Click **Next**.

   On the **Step 2 of 3** screen, you can assign functions to the user-configurable buttons on the ISCP. See Figure 6-2 on page 113 for the location of the user-configurable buttons.

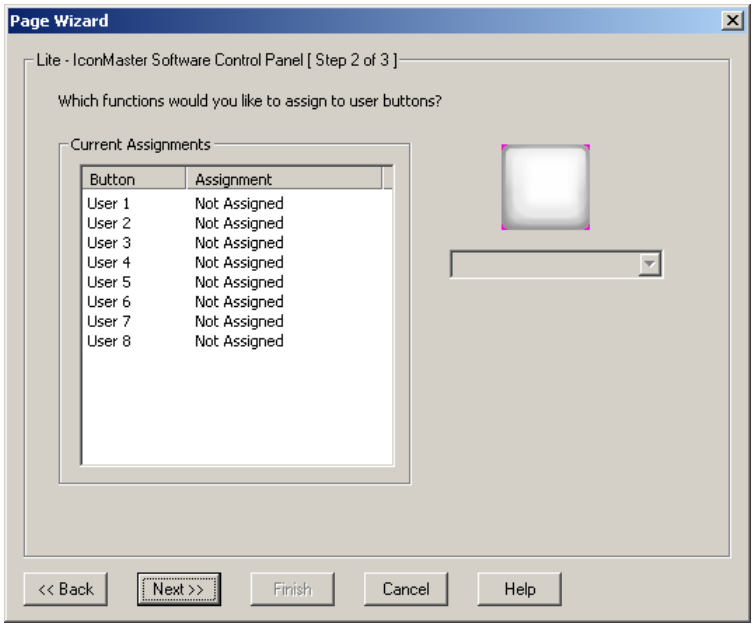


Figure 6-19. IconMaster Wizard—Step 3 of 4

5. Click on the button in the **Current Assignments** table, and then choose an assignment from the menu.

   Options include:

   - **GPO 1-13**, **Ext-1 GPO - 24**, and **Ext-2 GPO 1 - 24** (General Purpose Output Control) The button will trigger a specific GPO
   - **Quick Select 1-8** Causes the recall of the previously stored combination of function attributes
   - **FTB** (fade to black) Causes the video program outputs to immediately fade to black
   - **Silent** Causes the audio program outputs to immediately fade to silence
   - **Fast Reset** Quickly resets audio levels

6. Click **Next** to open the **Step 3 of 3** page of the wizard.

   Here you are able to select the name for your control panel.

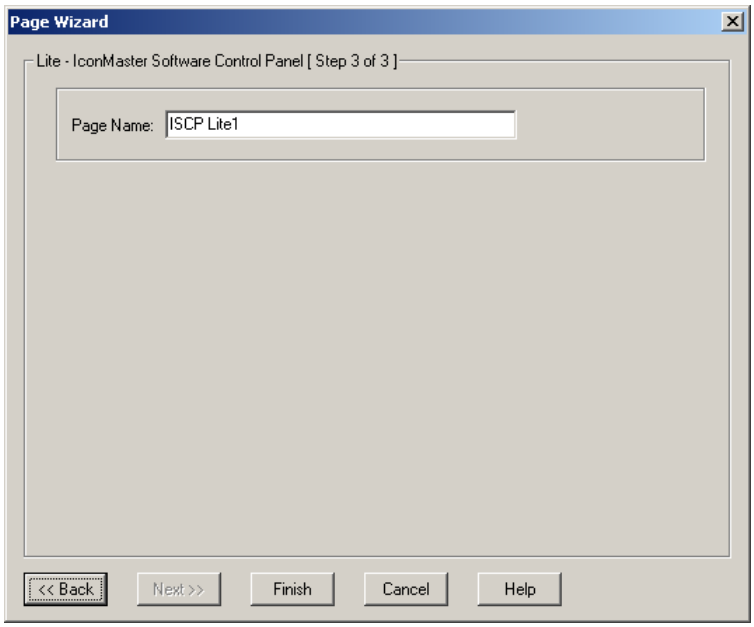


Figure 6-20. IconMaster Wizard—Step 4 of 4

   By default, the page is named after the Routermapper database.

7. (Optional) Type a new name beside **Page Name**.
8. Click **Finish**. The panel is created.

After you switch to Control mode, you can use the IconMaster Software Control Panel.

Adjusting a Configuration

Once created, you can make the following changes to an ISCP (changes must be done in Build mode):

- “Changing User-Configurable Button Assignments” on page 124

- “Reconfiguring Channels and Changing CENTRIO Layout Assignments” on page 125

Changing User-Configurable Button Assignments

To revise the function of a user-configurable button, while in Build mode:

1. Right-click on the button that you want to change on the ISCP page, and choose **Component Wizard** from the context menu.

   The **Component Wizard** for that button opens.

   A button’s component wizard is the same as Figure 6-13 on page 122, with only the selected button.

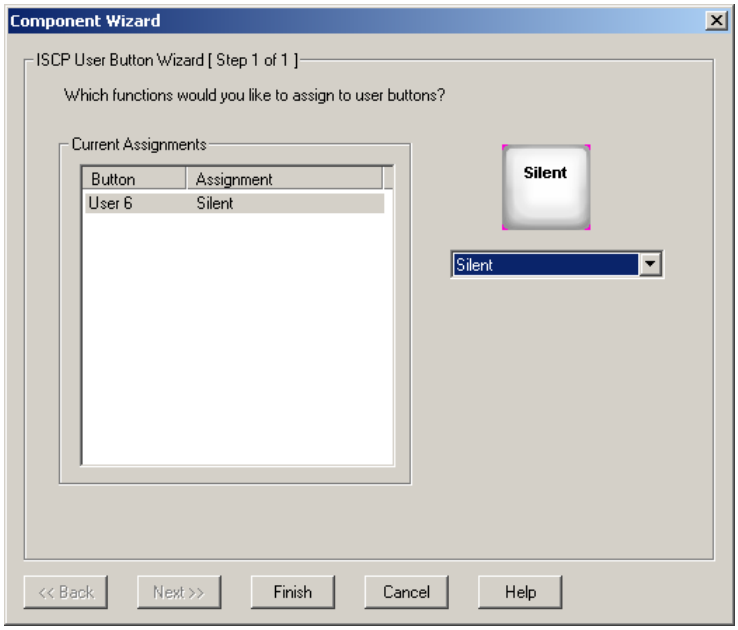


Figure 6-21. Component Wizard for User Button 6

2. Choose an item from the drop-down menu.
3. Click **Finish**.

The text on the selected button is updated.

Note that you have to open the **Component Wizard** for each button you want to change.

Operating IconMaster Software Control Panel

Once an ISCP has been created, when you switch to Control mode, you can start controlling and monitoring your channels. See “Setting the Operational Mode” on page 110.

The functionality of the ISCP is largely the same as that of the hardware control panel. Figure 1-1 on page 2 and Figure 1-2 on page 3 compare the locations of the buttons on both panels.

If you have multiple IconMaster hardware and software control panels, and use them to control and monitor the same IconMaster hardware, changes you make on one panel are reflected on the others.

Displaying the ISCP or ISCP-LITE

If you have just created an IconMaster panel in Build mode (see “Creating an ISCP Panel” on page 17) and you switch to Control mode, the panel will open.

If you have previously used ISCP and left a panel open when you closed ISCP, by default the panel will open when you relaunch the software.

To open a panel if you have previously closed the panel:

1. From the main menu, choose **File** > **Open**.
2. Browse to the location of your panel file.

   The main panel and all its sub-panels are stored together in a single folder. If you open a sub-panel, it will not connect to the pre-configured channels (IconMaster master control switchers) and the buttons will have no effect.
3. Click **Open**.

Your panel will open.

Figure 6-22. Navigator's IconMaster Panel in Full Screen Mode

Pages are designed to be displayed on a 1280 x 1024 screen in full screen mode.

To switch to full screen mode, select **View** > **Full Screen** from the main menu or press F11 on your keyboard.

To exit full screen mode, click the **Exit FullScreen Mode** button that appears on the interface.

Lock Panel

When the panel is locked, clicking any button has no effect, until the panel is unlocked.

Hold the button down for two seconds to lock the panel. A countdown appears on the button as you approach the target duration.

When a panel is locked, the **Lock** button will flash. Pressing any button for any length of time will have no effect.

To unlock the panel, hold down the Lock button down for a quarter of a second. A countdown appears briefly on the button.

Selecting an IconMaster Channel to Control (ISCP Only)

In the top left corner of an ISCP panel are **Channel Select** buttons. These represent different IconMaster systems. There can be up to eight, as configured using the wizard. See “Creating an ISCP Panel” on page 17 for more information.

Click a **Channel Select** button to choose a different channel (IconMaster system). The active channel’s button is red. All subsequent actions you make on the ISCP panel will apply to that channel only, until you select a different IconMaster system by clicking another **Channel Select** button.

Note

Do not press the Channel Select buttons while in Fast Reset mode.

To configure Primary and Secondary channels, see page 207.

Note

A ISCP-LITE panel automatically connects to the associated Hardware Remote Control Panel, and does not have channels to control. Instead, the ISCP-LITE automatically folllows all user-interface actions on the HRCP, including lamps, button pushes, audio adjustments, and audio VU meter updates. If the HRCP is placed into Primary/Secondary control mode, the ISCP-LITE willl continue to automatically follow the status of the current Primary control channel on the HRCP.

Dynamic Page Control Buttons

The eight **Dynamic Page Controls** buttons (see Figure 6-22 on page 131 for the location of these buttons) on the ISCP or ISCP-LITE provide access to parameter controls.

When you press one of these buttons, the region to the right of these buttons updates to reflect the options that are available under that particular tool.

Tracking

In order to allow the Dynamic Page Control buttons to follow the actions that are used on other parts of the switcher -- the external keyer buttons, etc., the IconMaster Software Control Panel has a tracking feature.

If one of the dynamic page control buttons is selected (lit), then the dynamic page that is selected will be continuously displayed. Tracking can be considered to not be in effect.

If none of the dynamic page control buttons is selected, then the dynamic page section of the ISCP will follow the operational state of the system. In this case, tracking is in effect.

Thus, if an internal keyer button is pressed, the dynamic page will display the internal keyers dynamic page. If the FX button is pressed, the effects dynamic page will appear. If an assignable source is pressed, the source assignment page will load.

For tracking to be active, no Dynamic Page Control buttons can be lit.

Chapter 7

IconMaster Configuration Utility

Overview

Harris's IconMaster configuration utility software, or ICU, is an easy-to-use Windows®-based application for setting up and configuring the IconMaster hardware system. It allows you to control configuration of input/output functions; audio, effects, and transitions; system components; and panel components through on-screen menu selections.

IMPORTANT! **You may or may not have access to the ICU software. If you do not, you must ask your system administrator to perform these operations for you.**

- "Installing ICU Software" on page 136
- "Starting ICU" on page 139
- "Initializing IconMaster" on page 140
- "Managing ICU Databases" on page 141
- "Input/Output Group Settings" on page 144
- "Functional Group Settings" on page 157
- "Control Group Settings" on page 171
- "System Config Group Settings" on page 179
- "Panels Group Settings" on page 196

This chapter presupposes that you are familiar with the layout of an IconMaster control panel. If you are not, please refer to Chapter 1: "Introduction" for more information.

Note

Changes made in the IconMaster Configuration Utility will not take effect on an IconMaster Switcher until the database has been uploaded to the IconMaster frame. See page 143 for instructions.

Installing ICU Software

In order to have a fully functioning IconMaster control panel, you must use ICU to configure it. Here are the steps involved in a full installation:

1. Check the system requirements (page 137)
2. Assemble the tools you'll need (page 137)
3. Configure the PC display (page 139)
4. Install the IconMaster configuration utility from CD to PC (page 137)
5. Check the Ethernet connections (page 139)
6. Start the configuration utility application (page 139)
7. Adjust network settings (page 140)
8. Adjust the operating standard (page 141)
9. Adjust the system timing (page 141)

Default Configuration Files

For your convenience, several default configuration files are included on the IconMaster SoftTools CD included with your IconMaster control panel. You can use and modify these files.

These files are set up for an SD-525i/59 bilevel sync:

- Default_SD_NSM_Embedded.xml
- Default_SD_NSM_Discrete2ch.xml
- Default_SD_Panacea_Embedded.xml

These files are set up for an HD-1080i/59 with trilevel sync

- Default_HD_NSM_Embedded.xml
- Default_HD_NSM_Discrete2ch.xml
- Default_HD_Panacea_Embedded.xml

These files are "getting started" databases for you to use if you do not have a router database already configured for your system:

- Pana16x4 SDIAES1.da4 (Panacea 16×4, SDI video with 1 AES audio)
- Pana16x4 SDIAES2.da4 (Panacea 16×4, SDI video with 2 AES audio)
- Pana16x4 SDIEMB.da4 (Panacea 16×4, SDI video with embedded audio)
- Pana16x8 SDI-CQ.da4 (Panacea 16×8, Clean/Quiet, SDI video with embedded audio)
- Pana16x16 SDIEMB.da4 (Panacea 16×16, SDI video with embedded audio)
- Plat64x64 SDIAES.da4 (Platinum 64×64, SDI video with 1 AES audio)
- Plat64x64 SDIEMB.da4 (Platinum 64×64, SDI video with embedded audio)

System Requirements

The following minimum requirements are necessary to operate IconMaster configuration software.

Table 7-1. IconMaster Configuration Software System Requirements

Item	Specification
CPU	266 MHz Pentium II
RAM	At least 128 MB
Hard disk space	At least 30 MB free
Additional disk drives	CD-ROM or CD-RW
Operating systems*	Windows® 2000 and Windows® XP, with Microsoft® Internet Explorer 5.0 or later
Port(s)	Ethernet
Display resolution	1024×768, high color (16 bit) or higher
Pointing device	Mouse, trackball, touch screen, or other pointing device

*Windows 2000, Windows XP, and Microsoft Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Tools You Will Need

- IconSeries Soft Tools CD (P/N 178-000176-00)
- PC matching system requirements

Installing the IconMaster Configuration Utility

1. If an existing version of the IconMaster configuration utility is installed on the PC, uninstall it, and then restart the PC.
2. Close all other applications running on the PC and insert the Installation CD into the PC CD-ROM drive.
3. Double click **Setup.exe** if setup does not start automatically.
4. When the **Welcome** box appears, click **Next**.
5. When the **Warning**! box appears, click **Next**.
6. Accept the Harris Software License.

   If you do not accept the license, installation will not continue.
7. When the Microsoft .NET framework box appears, follow the instructions, and then click **Next**.
8. When the **Select Installation Type** box appears, follow the onscreen instructions to install all four software applications (Content Editor, LogoCreator, IconLogo SoftPanel, and IconMaster Configuration Utility).

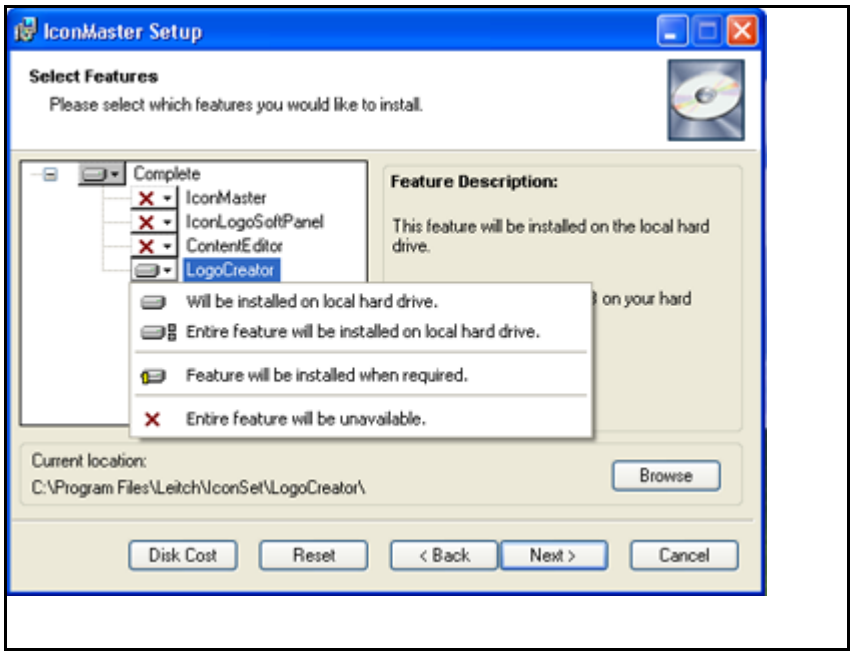


Figure 7-1. Selecting or Deselecting a Feature

9. When the **Setup Complete** message appears, click **Finish**.

Removing IconMaster Configuration Software

To remove IconMaster Configuration software:

1. Go to the Windows Control Panel (**Start** → **Settings** → **Control Panel**), and then select **Add/Remove Programs**.
2. Select Harris IconTools from the list.
3. Select **Remove** and follow the instructions provided on-screen.

CAUTION

Removing IconTools will also remove LogoCreator, Content Editor, and IconLogo SoftPanel.

Ethernet Connections

IconMaster uses Ethernet-based communication. Default IP addresses will function correctly in a “one frame and one control panel” configuration if they are both connected to the same switch that is *not* connected to a network server/ router.

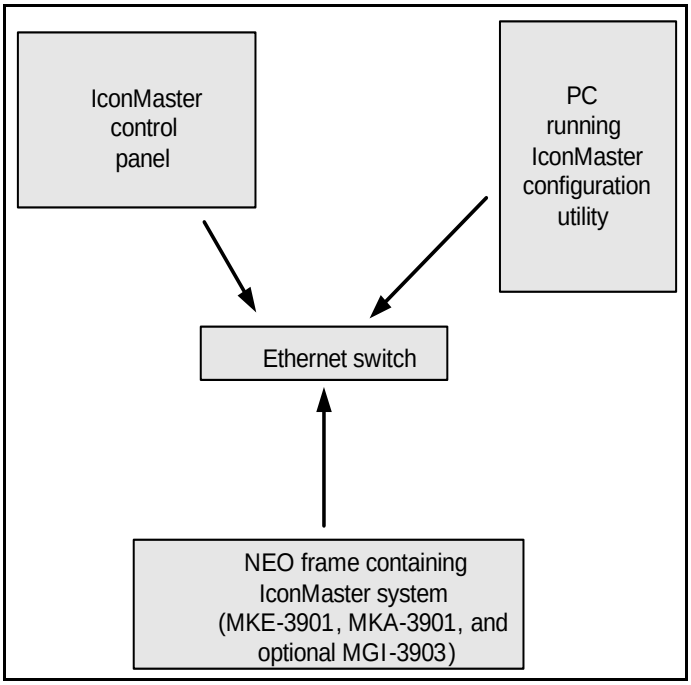

IconMaster control panel
PC running IconMaster configuration utility
Ethernet switch
NEO frame containing IconMaster system (MKE-3901, MKA-3901, and optional MGI-3903)

Figure 7-2. Simple Non-Network IconMaster Configuration

Starting ICU

To start the ICU application, select the **IconMaster Configuration Utility** icon by following this path:

Start → Programs → Harris → IconTools → IconMaster

The IconMaster configuration software main menu will display. The main window of the IconMaster configuration software provides a list of the main menu item groups. The groups that appear depend on whether you select frame configuration or panel configuration.

Configuring a PC Monitor for Best Display

For IconMaster software to show clearly and appropriately on a PC monitor:

1. Set the **Display Properties** for the monitor to 1024×768 pixel resolution (or larger) with regular or small fonts.
2. Go to the **Start** menu, and then select **Settings → Control Panel → Display → Display Properties → Settings**.
3. Set the color palette to display either **High** (16-bit) or **True** (24-bit) color.

Frame Configuration Menu Groups

When you choose to create a new IconMaster Frame Configuration (**File** > **New** > **IconMaster Frame Configuration**), four menu groups will appear. They are described in the following sections:

- “Input/Output Group Settings” on page 144
- “Functional Group Settings” on page 157
- “Control Group Settings” on page 171
- “System Config Group Settings” on page 179

Panel Menu Group

When you choose to make a new Control Panel Configuration (File > New > Control Panel Configuration), one menu group will appear. For information on this menu group, see “Panels Group Settings” on page 196.

Initializing IconMaster

Once you have started the IconMaster configuration utility, you will need to make adjustments to the following settings:

- Network settings
- Operating standard
- System timing

Network Settings

The default IP address will function correctly in a “one frame and one panel” configuration if both frame and panel are connected to the same switch that is *not* connected to a network server or router. However, if you are connected to a network server or router, you will need to coordinate the IP address for the MKE-3901 module, the MGI-390x module, and/or the IconMaster control panel.

Notice that there are two different network settings selections within the main menu groups. One selection controls network settings for the frame (found in the System Configuration menu group), and the other selection controls the network settings for the control panel (found in the Panel Configuration menu group).

If you have changed the IP address on the card edge of the MKE-3901 module, you must make the same change in the **Network** dialog box (see page 189 for more information on changing this setting).

To change the network settings of the IconMaster control panel, access the **Panel Network Configuration** dialog box (see page 197 for more information on changing this setting).

Operating Standard

The default operating standard for IconMaster is SD525 (270Mbit/sec). To change the operating standard, access the **Genlock and Standard** (see page 179 for more information on changing this setting).

System Timing

Changing the system timing causes the IconMaster system to adjust the horizontal and vertical phase of the reference input so that the most number of inputs have their vertical timing value at zero. To make changes to the IconMaster timing, access the **Genlock and Standard** dialog box (see page 179) to make changes to the IconMaster timing.

CAUTION

Do not do a system timing activity until the IconMaster has been downloaded with a valid configuration file with appropriately assigned primary inputs.

Unwanted on air operation may result.

Managing ICU Databases

Note

Instructions on enabling a RouterMapper database for use with an IconMaster system begin on page 213.

ICU uses XML databases to store configuration information about the different IconMaster setups you develop.

CAUTION

If you do not want your changes to appear in the active XML database, you should create a new XML database file before you make any changes.

You can create an ICU database from scratch or create one by opening an existing database, renaming it, and then manipulating existing information.

Creating an ICU Configuration File

1. Start IconMaster, as explained on page 139.
2. At the IconMaster Configuration Utility main menu window, select **File** → **New**. The **New Configuration** dialog box will appear.

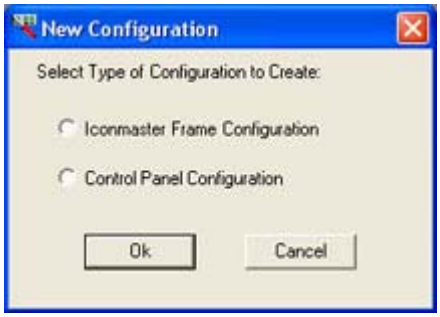


Figure 7-3. New Configuration Dialog Box

3. Select the appropriate radio button to set up the type of configuration file you want to create.

Table 7-2. New Configuration Types

Configuration	Description
IconMaster Frame Configuration	Specific configuration of inputs and outputs, transition, audio and effect buttons, machine control (including GPI/GPO), genlock, router management, automation, license management, serial port and CENTRIO
Control Panel Configuration	Specific configuration and panel network configuration functions

4. Depending on which selection you made in step 3, the applicable menu options will appear.
5. Click **File** → **Save As**, and then enter a name for the new database.
6. Click **Save**. This will become the currently active database, and its name will be displayed in the Title bar at the top of the ICU main menu window. Database files are saved in the **Documents and Settings** → **All Users** → **Application Data** → **Harris** → **IconMaster** directory on your local drive.

Opening an Existing ICU Configuration File

Database files are saved in the **Documents and Settings** → **All Users** → **Application Data** → **Harris** → **IconMaster** directory on your local drive.

CAUTION

ICU for IconMaster 3.1 has been tested for backwards compatibility with Iconmaster 1.5.3 and IConmaster 2.X configuration databases. However, re-verify all configuration settings before applying them to the IconMaster.

It is strongly recommended that you back up your old configuration file before using a new 3.1 configuration file.

1. Start IconMaster, as explained on page 139.
2. At the IconMaster Configuration Utility main menu window, select **File** → **Open**. The **Open A Configuration** dialog box will appear.
3. Select a configuration file (XML file) from the displayed list. If the XML file resides in a different location, use standard Windows navigation techniques to move to the location of the file you want to display.
4. Highlight the name of the file you want, and then click **Open**.

Saving Databases

Saving to a New Database

1. From the menu bar, click **File**, and then select **Save As**. The **Save As** dialog box will appear.
2. In the File Name drop-down list box, do either of the following:
   - Enter a name for the database that will hold the changes you just made.
   - Highlight the name of an existing database (use standard Windows navigation procedures to select a location different from the default location). **Be very careful doing this.** Saving to an existing database will cause the software to overwrite the original database settings. It will not append your new changes to the existing database.
3. Click **Save**.
4. (Optional) Upload the effects to the IconMaster frame. See “Uploading Databases” on page 143 for more information.

Uploading Databases

Changes made in an ICU dialog box will not take effect until the saved database has been uploaded to the IconMaster frame. To upload changes:

1. Save your current configuration file.

2. From the menu bar, click **Send CFG to frame**. An information message will prompt you to confirm the upload of the configuration to the IconMaster frame.
3. Click **Yes**. The database will be uploaded to the IconMaster frame.

   Most new settings will take effect on the IconMaster immediately. Changes that require a reboot include:

   - Standard change (also requires new firmware)
   - Upgrade license from IconMaster LITE to full IconMaster
   - A Change of serial port settings
   - Changing an SD system from 8 channel audio operation to 16 channel audio operation

Input/Output Group Settings

The **Input/Output** group on the left side of the IconMaster configuration software screen includes the following dialog boxes: Primary Inputs, UMD, Audio Configuration, Audio Over Matrix, and Aux Bus.

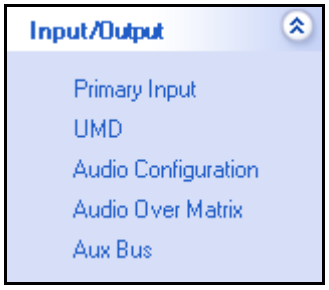


Figure 7-4. Input/Output Menu Group

This menu group controls system input and output configuration functions, as shown in Figure 7-4.

Primary Input Settings

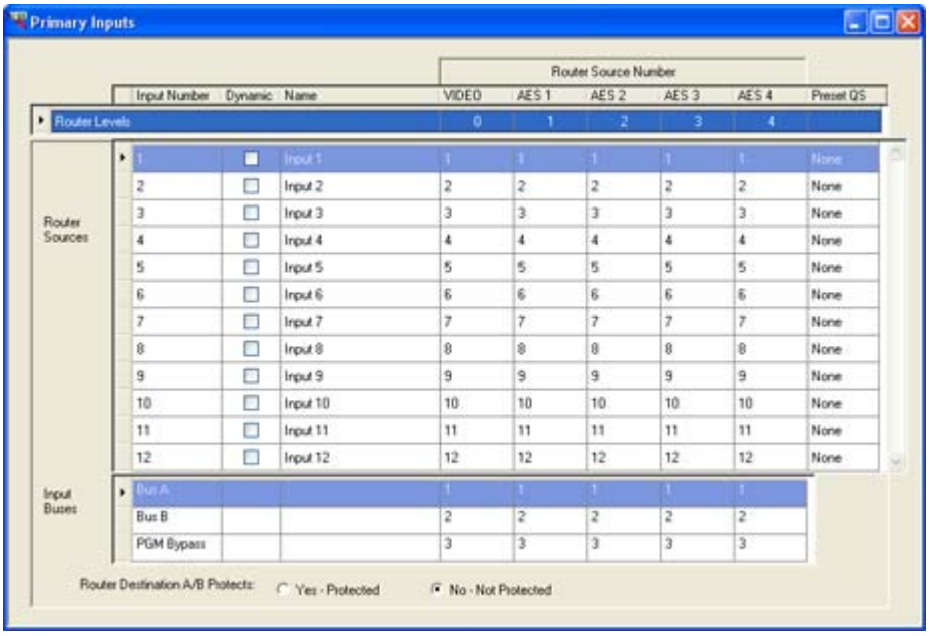


Figure 7-5. Primary Input Dialog Box

Using the Primary Input settings, you can perform the following actions:

- Change the names of your sources
- Manage router sources at the physical control panel (instead of always having to download a configuration from the ICU)
- Change the router source number
- Choose a preset quick select
- Enable Program Bypass
- Protect or unprotect the router A/B feeds to IconMaster[1]

To change the Name of the input source, double-click the name in the cell, and then enter the new name. The length of the name is limited to 10 characters (including spaces), over 2 lines, with a maximum of 5 characters per line.

To allow control panel router source management, click the Dynamic check box to the right of the router source number. If you have selected “12 inputs” as the primary input mode, you will be able to allow control of 12 sources. if you have selected “22 inputs” as the primary input mode, you can allow control of 22 sources. To set the primary input mode, you must use the System Configuration dialog box. See page 184 for instructions.

[1] The Protected option allows a router destination to be locked to prevent inadvertent changes to the A/B sources feeding the IconMaster. With the Protected feature enabled, only the IconMaster will be able to change the router destination at will, but other users will be prevented from changing that destination until the Protect is removed. The X-Y bus panel ID setting on the Router Configuration page must be set to a unique value.

The Preset QS (Quick Select) assigns the sources you pre-configured in the Quick Select Dialog Box (see page 164) to a primary input. **To choose a preset quick select**, click the Preset QS drop-down list box that corresponds to the appropriate router source number, and then scroll down to the appropriate quick select number. Use of preset Quick Selects is not recommended if the **Auto Take** function of Quick Selects is enabled.

Note

The **PGM Bypass** option is not available on a system that do not include an IconMaster breakout module.

To enable the **PGM Bypass** option, click the check box to the right of the PGM Bypass Input Bus selection.

When the **PGM Bypass** option is selected, IconMaster can control an auxiliary output from the primary router (the router output for bypass will be a separate output with the same content as the IconMaster PGM output for this to operate correctly) . This auxiliary output will follow the same source that is currently on-air. The router output can be linked to the IconMaster's emergency PGM input and, in the event of an IconMaster failure or loss of power, a bypass relay will instantly connect the auxiliary signal to the IconMaster's PGM output BNC.

To protect router A/B feeds to IconMaster, click the **Yes - Protected** radio button. **To unprotect the feeds**, click the **No - Not Protected** radio button.

To prevent operators from protecting a Destination and then not being able to find the panel that originated the protect, Harris physical control panels incorporate an override feature. **To override a Destination Protect that was set by another panel or IconMaster**, press and hold the control panel Protect key until it stops blinking (about 5 seconds). At the end of the 5-second period the Destination Protect key will no longer be lit, which means that the destination is no longer protected. For more information about this feature, see the pertinent control panel installation, configuration, and operation manual.

UMD Configuration Settings

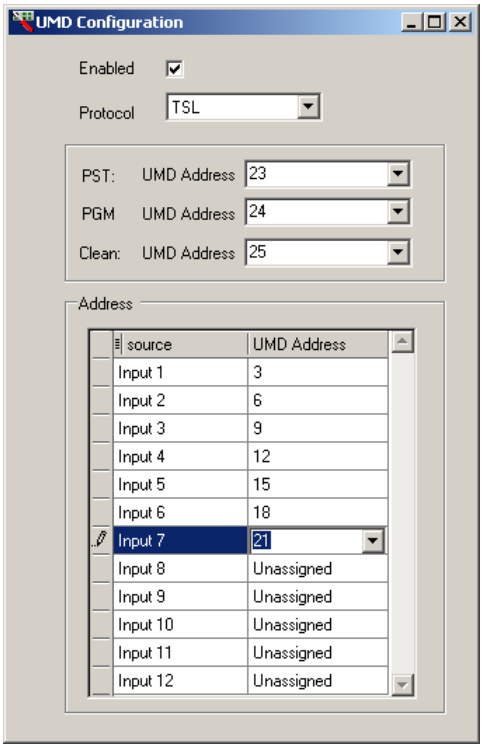


Figure 7-6. UMD Configuration Settings Dialog Box

Using the UMD Configuration Settings dialog box in ICU, you can activate under monitor text labels and tally lights using a serial tally protocol. As a result, UMD text labels and serial tally indicators will be enabled on a multiviewer output device such as SuiteView.

Normally this will indicate, for example, the PIP on a video wall that is currently on the PGM monitor, PST Monitor, and/or Clean monitor.

To set up IconMaster to send UMD data to a monitoring device:

1. Check **Enabled** to enable under monitor display on the IconMaster (keeping in mind that the change will not take effect until you upload the Configuration file to the frame).
2. Select the communication protocol your UMD uses.

   IconMaster 3.0 supports TSL protocol.
3. For each of **PST**, **PGM**, and **Clean**, type a UMD address into the text field.

   On your monitoring device, the object that is set to that same UMD address will display the text label of the monitor -- Clean, PST, or PGM.
4. In the **Address** table, for each source, indicate an UMD address for that source.

   On your monitoring device, the object that is set to that same UMD address will display PGM and PST tallies.

Audio Configuration Settings

Using the **Audio Configuration** dialog box in ICU, you can designate the audio output for each audio input.

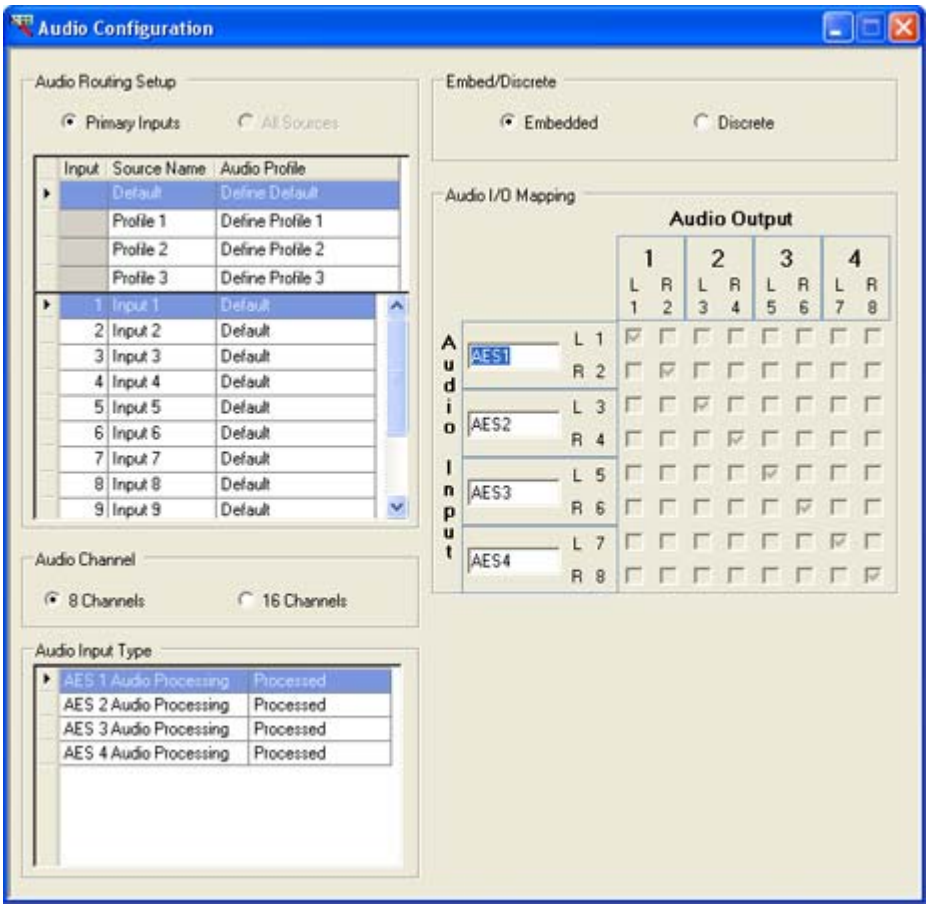


Figure 7-7. Audio Configuration Dialog Box

Note

The Audio Channel **8 Channels/16 Channels** selections are not available if the IconMaster has been configured for HD operation.

Audio Profiles

In order to make configuration of inputs with similar audio settings easier, IconMaster provides one default and three user-definable audio profiles to be created. An audio profile is a set of audio input to output mappings, which can be applied to any input source.

In the Audio Routing Setup, all inputs are assigned the Default profile.

To edit a profile:

1. Select one of the user-defined profiles at the top of this screen.

2. (Optional) Click in Source Name field and type a new name to rename the profile.

   The Audio Profile name will update accordingly.

3. Select the primary audio input type. Options are:

   - **Embedded** audio is recovered from the specific SDI input.

     In an SD IconMaster system, as in Figure 7-7, under **Audio Channel**, you can determine whether to use 8 or 16 audio channels. Then, for each primary audio input, each of the 8 or 16 audio input channels can be assigned to any or all of the 8 or 16 audio output channels.

     Note

     If the audio configuration for an SD Iconmaster is changed from 8 channel to 16 channels, or from 16 channels to 8 channels, you must reboot IconMaster to ensure that all audio channels are properly configured. After uploading the configuration file to the IconMaster, you can reboot the MKE using ICU's **Reboot MKE** button.

     In an HD IconMaster system with embedded audio, as in Figure 7-8, for each primary audio input, each of the 16 audio input channels can be assigned to any or all of the 16 audio outputs.

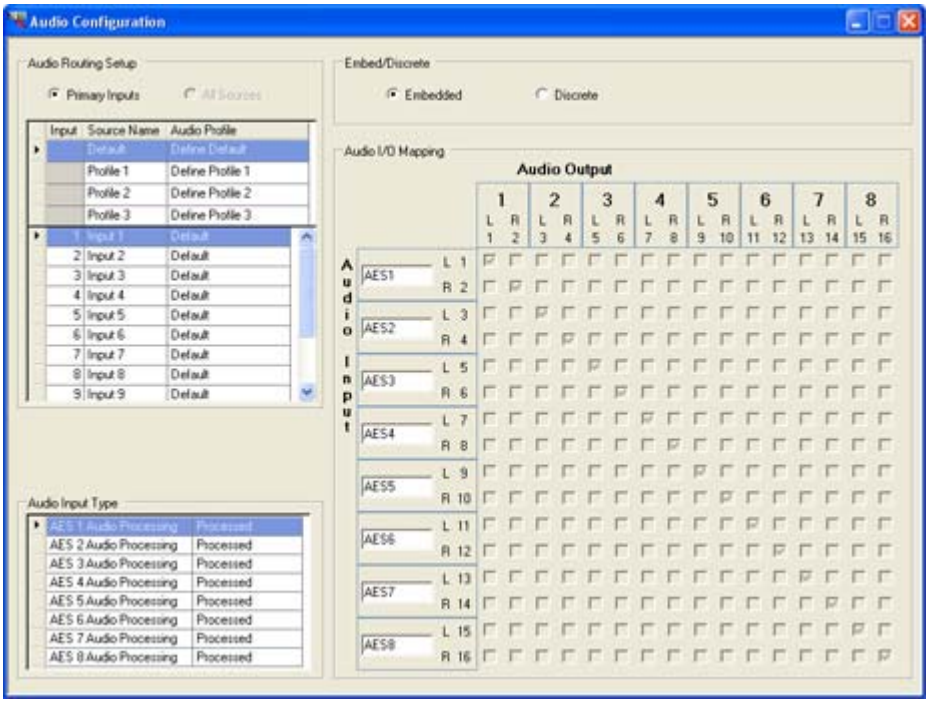


Figure 7-8. Audio Dialog Box — HD with Embedded Audio

- **Discrete** audio is available with the optional MKA-3901 audio module only. Discrete audio inputs are sample rate converted, and thus can only accept PCM audio.

  Note

  Due to sample rate converters, Dolby-E inputs via discrete audio are not supported by IconMaster.

  In a HD IconMaster system with discrete audio, as in Figure 7-9, for each primary audio input, each of the 8 audio input channels can be assigned to any or all of the 16 audio outputs.

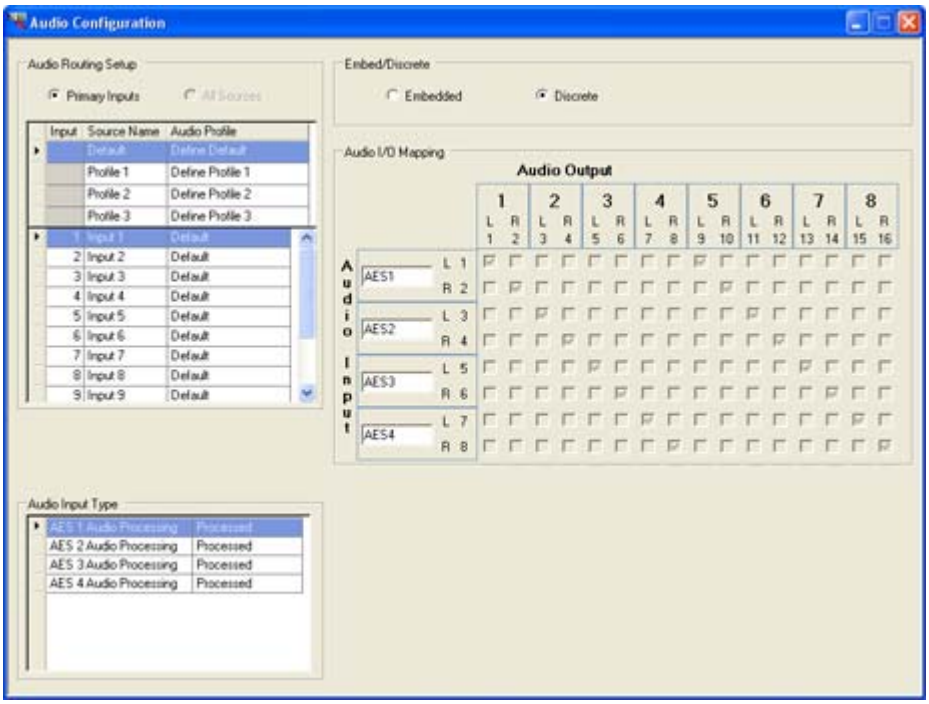


Figure 7-9. Audio Dialog Box — HD with Discrete Audio

If discrete audio inputs are used, all **Audio Input Type** settings should be manually assigned to either Processed or Unprocessed. The Automatic setting is not applicable to discrete audio inputs.

4. Under **Audio Channel**, select either 8 or 16 channels.

   As the audio configuration state changes from 8 to 16 (or vice versa), the Audio Over Matrix and Audio Cluster dialog boxes will also change accordingly. See page 152 and page 170 for more information.

5. Edit the **Audio I/O Mapping** grid.

This audio mapping will only be applied to the specified input.

IconMaster can recover up to 16 audio channels from each of the 12[1] or 22[2] primary embedded inputs. Alternatively, if the MKA-3901 module is present, IconMaster allows for up to 4 AES inputs from each of the 12 or 22 primary inputs. Each of the AES inputs has 2 audio channels for a total of 8 audio channels for each input.

6. To rename an audio input, in the **Audio I/O Mapping** grid, double-click on the name of the input, and then enter a new name.

   A maximum of 6 characters is allowed.

7. Under **Audio Input Type**, for each AES audio input select one of the following:

   - **Processed** (default)—Full audio control is enabled. IconMaster ignores incoming C and V bits (see Table 7-3), and full audio control is enabled. Operators have full control of audio gain, channel swapping, sum, mono, etc.
     The output AES channel status (C and V) bits are forced to indicate valid PCM audio.
   - **Unprocessed**—Audio is passed without modification (all audio settings are ignored). This is the required setting to pass non-PCM audio, such as Dolby® E encoder/ decoder[3], through IconMaster.
     full audio control is disabled. No gain or channel manipulation is allowed. The output AES channel status (C and V) bits follow the incoming channel status bits.
   - **Automatic (default)—**IconMaster monitors the incoming C & V channel status bits. If the incoming channel status bits indicate Valid PCM (C=0, V=0), then full audio control is enabled. If either channel status bit is set to 1, audio control is disabled.
     The output AES channel status bits (C and V bits) follow the incoming channel status bits.

Table 7-3. AES Channel Status Bits

Bit	Function	0	1
Each AES channel pair includes two important channel status bits:			
C	Indicates whether the AES channel contains PCM sampled audio data	PCM audio, which can generally be gain adjusted, summed, swapped, mixed to mono, etc.	NON-PCM data, which should not be altered in any way.
V	indicates whether the AES channel contains VALID data.	Valid data	Invalid data
The following outlines some common data types, and their C & V bit settings:			
C bit	**V bit**	**Meaning**	**Typical Use**
0	0	Valid PCM	Normal audio

[1] This is true for 12 input mode.
[2] This is true for 22 input mode.
[3] Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

Table 7-3. AES Channel Status Bits

Bit	Function	0	1
1	0	Valid Non-PCM	Dolby-E, data carried as audio
0	1	Invalid PCM	Audio with error (CRC, equipment, etc), which should NOT be converted to analog via D/A process.
1	1	Invalid Non-PCM	Rarely seen

When changing the assignment from **Processed** to **Unprocessed**, all audio settings will return to their default values. When changing the assignment from **Unprocessed** to **Processed**, all audio settings will be restored to the values currently set on the control panel.

Audio Over Matrix Settings

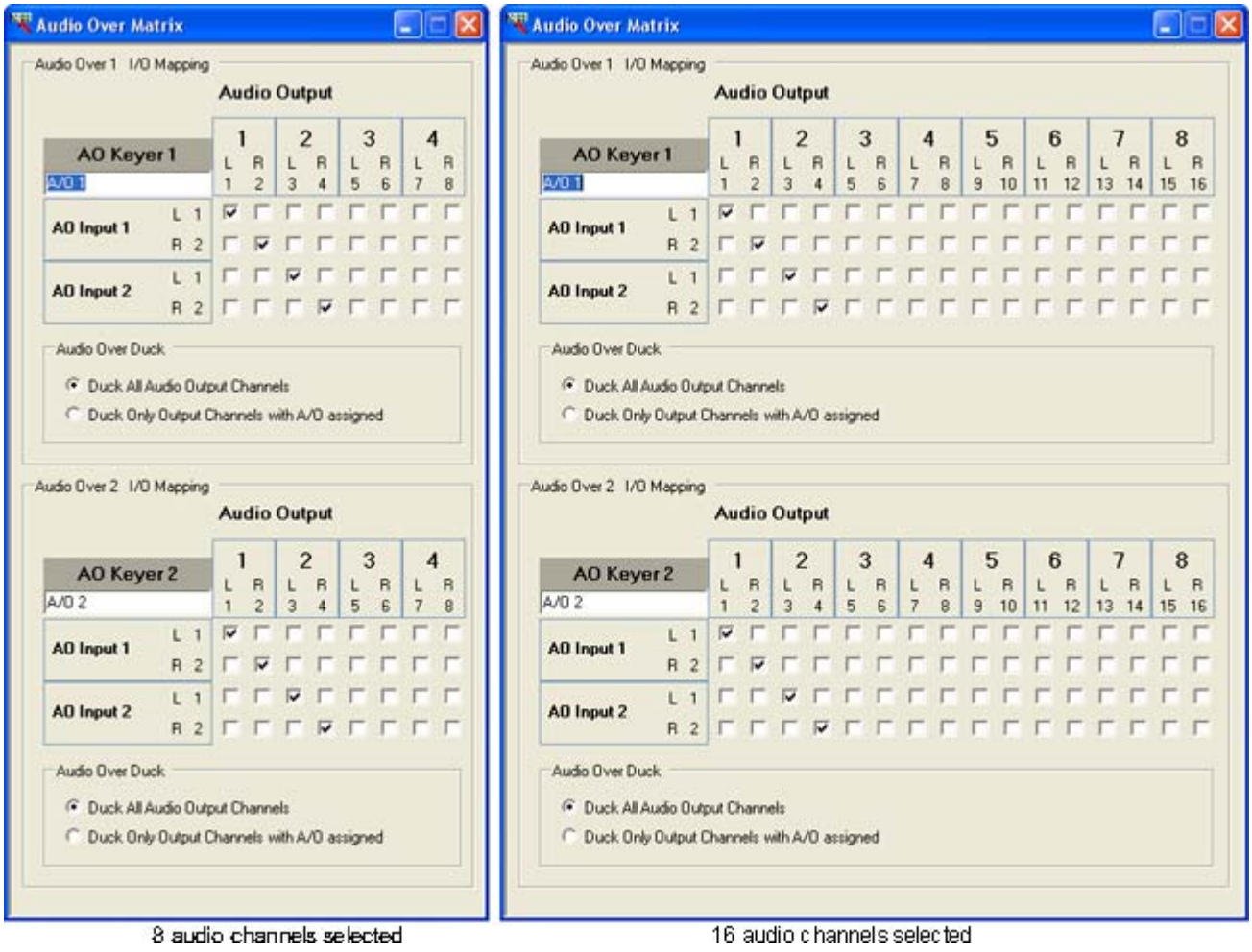


Figure 7-10. Audio Over Matrix Dialog Box

The Audio Over Matrix dialog box includes the settings for the Audio Over inputs 1 and 2. Using this dialog box, you can assign the A/O inputs to the audio outputs and configure audio ducking.

IconMaster has 2 AES inputs dedicated to the audio overs. Each AES input has 2 audio channels. The number of outputs corresponds to the number of audio channels selected at the Audio Configuration dialog box (see page 148). In an SD system, each of the 4 channels can be assigned to any or all of the 8 or 16 Audio Outputs (depending on how SD audio is configured. See page 152). In an HD system, each of the 4 channels can be assigned to any or all of the 16 Audio Outputs.To change the assignment, select the check box that corresponds to the input/output combination required.

An audio output cannot be assigned to more than 1 audio input. An audio input can be assigned to more than 1 audio output.

The audio assignments can be different for A/O1 and A/O2.

As shown in Figure 7-10, audio over channels 1, 2, 3, and 4 are defaulted to Audio Outputs 1, 2, 3, and 4, respectively.

Audio over ducking can be configured differently for A/O1 and A/O2.

- If Duck All Audio Output Channels is selected, any audio output that is not assigned an audio input will “fade down” the background audio on that channel during an audio over.
- If Duck Only Output Channels with A/O Assigned is selected, only the audio outputs that are assigned an audio input will “fade down” the background audio and perform the audio over.

Note

Logo audio" matrix settings are configured in the IconLogo soft gui tool. See “Audio Menu Page” on page 294 for more information.

Aux Bus (Auxiliary Bus Configuration) Settings

The **Auxiliary Bus Configuration** dialog box (Figure 7-11) configures the IconMaster auxiliary bus routing. This makes it possible to control additional router destinations with the Aux bus. The IconMaster control panel provides for the selection of 1 of 12 Aux buses.

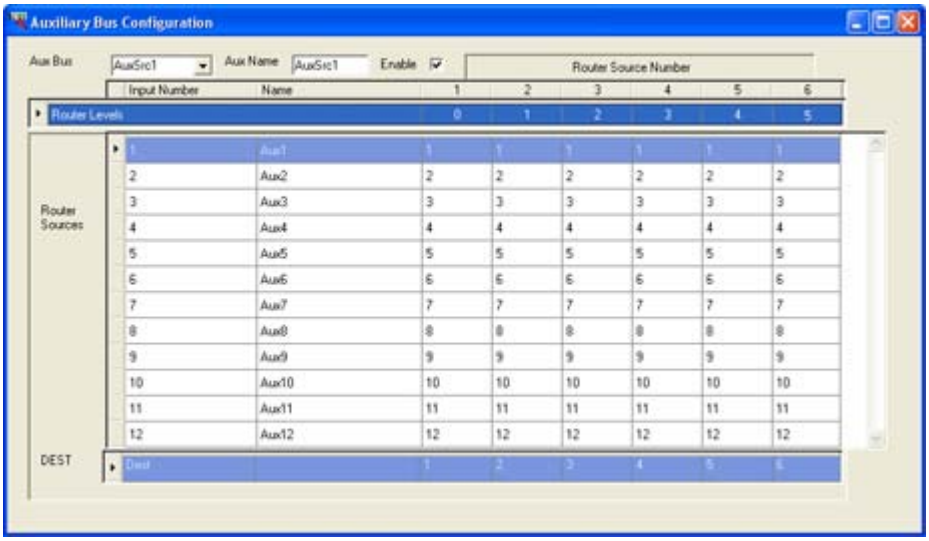


Figure 7-11. Auxiliary Bus Configuration Dialog Box

Any destinations can be used for the **Aux** buses.

Configuring Aux Buses in Static Mode

When using an internal router, or when using an external router but not in Router Database mode (see page 182), follow these steps to configure the Aux Buses:

1. Select one of the Aux buses listed (1 through 12) from the **Aux Bus** drop-down list box.

   The name associated with that Aux bus item will appear in the Aux Name box.

   change the name(s) of the Aux bus configurations, double-click in the **Aux Name** box, and then enter a new name for the aux bus (a maximum of 6 characters is allowed).

   After the changes have been uploaded to the IconMaster frame, this name will appear in the LCD button that is on the extreme right side of the Aux bus. (See Figure 2-1 on page 20 for the LCD button location.) If multiple Aux bus ports are assigned individual names (e.g., Aux 1 is renamed Aux A, Aux 2 is renamed AuxCtrl), you can toggle the Aux bus LCD button to scroll through the various buses. Any Aux buses labeled “Unused” will not appear on the LCD button display.

2. if it is not already selected, click the **Enable** checkbox.

   Any aux buses that are not enabled will not appear in the LCD button display on the RCP, and will be grayed out in the ISCP.

   The router source levels will be set automatically, to the defaults in Figure 7-11.

3. To change the name of a router source configuration, click on the appropriate name box, and then enter a new name for the associated source (a maximum of 8 characters is allowed).

4. To change the level assigned to each **Aux** bus, click on the appropriate level box, and then choose the required level from the drop-down box. There is a maximum of 16 levels (0 to 15). Selecting **Unused** will disable an Aux bus from use.
5. The number in the **Dest** column should be set to the router destination being used for each of the **Aux** buses. To change the assignment, double-click on the **Dest** field to be changed, and then enter the new assignment. Press **Enter** to complete the change.

Any router input can be assigned to any of the 12 Aux bus sources (labeled **Src 1** to **Src 12**). This is possible for each aux bus independently. To change the assignment, double-click the **Src** field to be changed, and then enter the new assignment. Press **Enter** to complete the change.

Note

It is strongly encouraged that any Aux busses that are not in use be disabled using the **Enable** checkbox at the top of each Aux bus page, for Aux busses 1–12.

Configuring Aux Buses in Router Database Mode

To configure the Aux buses using an external router in Router Database mode (see page 182 for information), the Aux Bus dialog box will appear slightly different, as in Figure 7-12.

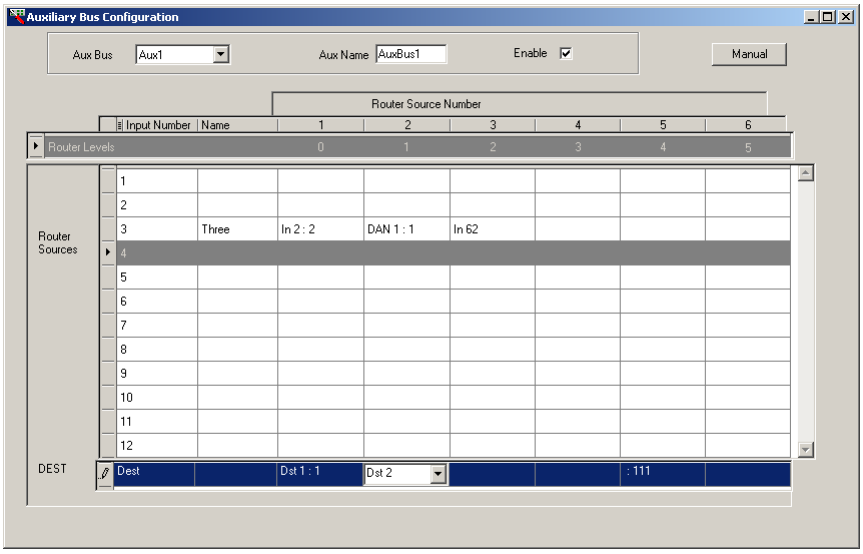


Figure 7-12. Aux Bus in Router Database Mode

To configure the Aux Bus in Router Database mode, follow the first three steps above, and then continue as follows:

1. For each input number, in the Router Levels row at the top of the grid, pick a level.

2. Pick a destination for that router source from the DEST row at the bottom of the grid.
3. In the **Source Input** grid, click a field to open a menu, and then click on an item in the router database.

   The field updates with the destination information for that cross-point.

Repeat these steps as necessary to complete the grid. All unused fields in the grid should be set to **Unused**.

When you select a router that is not in the database, all the sources will be listed. However, these sources will not have cross-points. To enter the cross-point, click **Manual**, and then type in the cross-point.

The label does not represent the cross-point. It is just there as a reminder.

Functional Group Settings

The **Functional** group on the left side of the IconMaster configuration software screen includes the following dialog boxes: Transition, Effects, Quick Select, Audio Cluster, and Keyer.

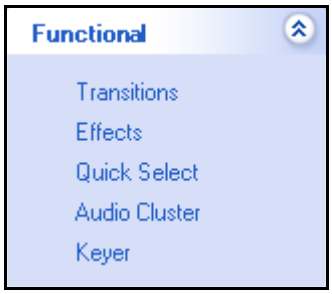


Figure 7-13. Functional Menu Group

This menu group controls the functional configuration of the IconMaster, as shown in Figure 7-13.

Transition Settings

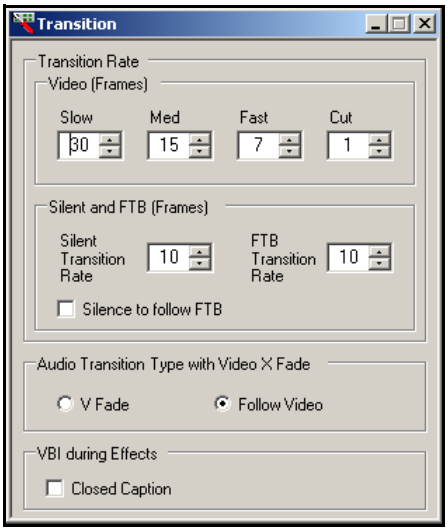


Figure 7-14. Transitions Dialog Box

The **Transition** dialog box in ICU contains parameters that affect the operation of the buttons on the **Transition Functions** cluster (see Figure 3-5 on page 37).

Setting Transition Rates

Unless otherwise stated, the range is from 0 to 300 frames.

Table 7-4.

Transition type	Description/Option	Default
Video Frame Rate	Slow	30 frames
	Medium	16 frames
	Fast	8 frames
	Cut	1 frame
Silent Transition rate	Fades out the audio at a faster rate than the video transition, to eliminate a distracting segue during the audio transition	10 frames
Fade to Black (FTB) Transition Rate	"Dissolves" a video picture to black	10 frames

Silence to follow FTB is normally used for transitions. With this option selected, the "fade to silence" during the video fade to black occurs at the rate you have set in the **FTB Transition Rate**. To enable this transition, select the **Silence to Follow FTB** check box on the Transitions window. The default value is disabled (unchecked).

Setting Audio Transition Types

Note

The manual use of a cut button always overrides the selection on the **Transition** function bus.

The **Audio Transition Type** can be either **V-Fade** or **Follow Video**. Choose the appropriate radio button for your selection, as follows:

- Choose the default **V-Fade** selection to fade the first source to silence, and then fade up the new source. During this operation, the "V" button on the **Transition Functions** bus is half-illuminated.
- Choose the **Follow Video** option to create a straight audio cross-fade.

Preventing and Enabling Closed Captioning

Select the **VBI** (vertical blanking interval) **Closed Caption** check box to prevent closed captioning on line 21 in 525 from being squeezed during an effect.

If the **Closed Caption** check box is not selected, the default value is line 20.

Effects Settings

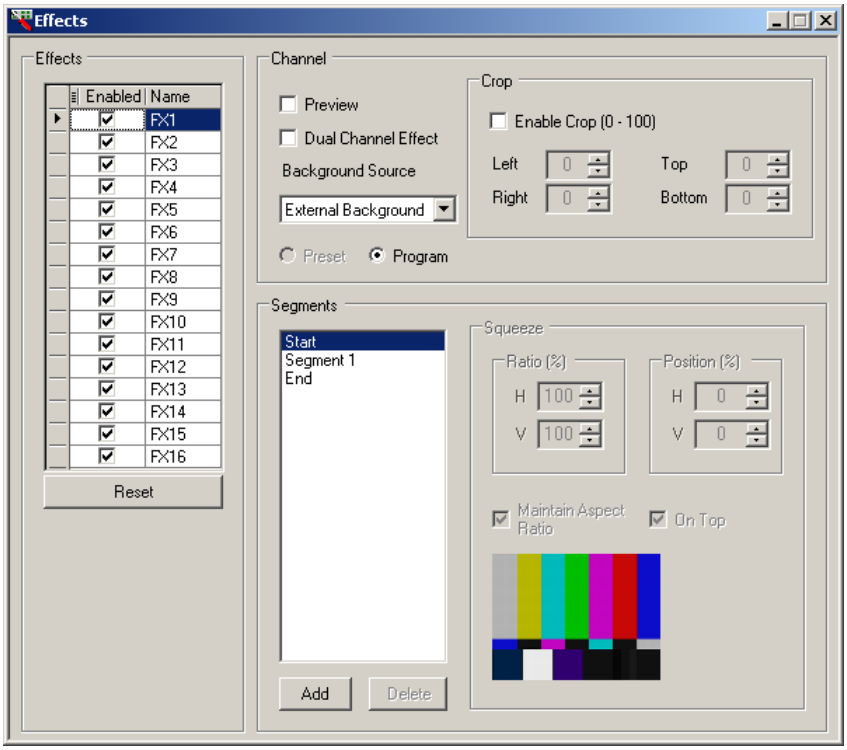


Figure 7-15. Effects Dialog Box

Using the **Effects** dialog box in ICU, you can perform the following actions:

- Create an Effect
- Edit an Effect name
- Disable and/or re-enable an Effect
- Reset an Effect
- Set a second channel for preview operations
- Select a channel to edit
- Change a background source
- Change a crop size
- Change the position of a channel
- Change the squeeze ratio of a channel

Preloaded Effects in Default Configuration Files

For your convenience, several default configuration files are included on the IconMaster SoftTools CD included with your IconMaster. These configuration files include the following preconfigured effects:

- Effect 1 = SQ-BRT, 1chl 35% window in upper right, with external background
- Effect 2 = SQ-BLT, 1chl 35% window in upper left, with external background
- Effect 3 = SQ-R, 1chl 75% H, 100%V on right side, with external background
- Effect 4 = SQ-L, 1chl 75% H, 100%V on left side, with preset background
- Effect 5 = SQ-URT, 1ch 75% L-Bar window in upper right with preset background
- Effect 6 = SQ-ULT, 1ch 75% L-Bar window in upper left with preset background

See page 136 for a list of files that are included.

Before You Begin

Before you begin, ensure that you observe the following:

- Each effect should be viewed as a sequence of events, like a filmstrip.
- Each effect must be defined horizontally and vertically (the default position of 0,0 is defined as the upper left corner of the screen).
- All effects start with the Program full size. This is defined as Start A.

Note

For both single channel and 2 channel effects, the sequence will end with either Program as the only full size on-screen image.

For a single channel effect, do not select the **Dual Channel Effect** check box.

- Segment 1 defines the position and size at the end of the first transition.
- There is an entry only for Program.
- The background may be **External Background** or **Preset**.
- The end of the effect is set by Program.

  For a single channel effect, the effect must end as a full-size Program or Preset.

For a 2-channel effect, select the **Dual Channel Effect** check box.

- **Segment 1** defines the position and size at the end of the first transition.
- There is an entry for both Program and Preset.
- The background may be **External Background** or **Preset**.
- The end of the effect is set by End A and End B.
- The effect must end as one of these options:

  - A full-size Program and a zero size Preset
  - A full-size Program and a full-size Preset fully on screen.
- If you **Preview Effect on PST** in your effect, you can choose to preview the effect before you send it to air. If you select **Dual Channel Effect**, you cannot preview the effect before you send it to air.

  Up to 16 different effects can be set up.

For an effect in SD, there may be potential discrepancies in horizontal and vertical blanking between analog and digital systems. It is recommended that a crop be added to the effect setup. IconMaster includes the following default values for the crop settings:

- Left 2
- Right 2
- Top 1
- Bottom 1

These default values prevent the appearance of a black border when the effect is underway.

Creating an Effect

An effect is made up of a sequence of events or *segments*. To create and store additional segments in your effect, click **Add.** Then, with the new segment number selected in the **Segments** field, you can modify what the effect looks like for that segment.

To create and store a multi-segment effect:

1. Double-click one of the cells in the **Effects** column, and then optionally, rename the effect (a maximum of 6 characters is allowed).
2. Select **Segment 1** in the **Segments** field for the effect being edited. When a segment is highlighted in the **Segments** field, the squeeze and crop fields are enabled.
3. Select **Enable Crop**, and then make your required numeric settings (0 to 100) for **Top**, **Bottom**, **Left** and **Right**.
4. Set the destination of your **Squeeze** effect in the first segment by changing the percentage numbers in the **Ratio** and **Position** columns.

   (Select **Maintain Aspect Ratio** if you need the horizontal and vertical values to be kept at a constant ratio.)

Note

Positions can be negative, for off screen positions above or to the left of the viewable screen area.

5. Click **Add** to create **Segment 2** of your effect, and then select new values for **Ratio** and **Position**.
6. Continue for segments 3 and 4 as applicable.

Up to 4 segments are available for each effect.

The **Reset** button deletes all of the settings for the effect being edited. When you select the **Reset** button, a pop-up confirmation window appears, verifying that you want to reset the manual effect.

Editing an Effect Name

1. Under the **Name** column in the **Effects** box, double-click on the name of the effect you want to change.
2. Enter a new name for the effect (a maximum of 6 characters is allowed).

Enabling an Effect

Click the empty check box to the left of the name of the effect you want to enable. As a result, the Enabled check box will have a check mark in it to indicate the selected effect is enabled.

Disabling an Effect

Click the check box to the left of the name of the effect you want to disable. As a result, the Enabled check box will appear empty to indicate the selected effect is disabled.

Resetting an Effect

1. Highlight the effect you want to reset.
2. Click the Reset button at the bottom of the Enabled/name columns. An information message will “ask” if you want to reset the selected effect.
3. Click **Yes**. The effect will be reset to its default value.

Setting the Second Channel for Preview Operations

To use the second channel of the effects engine to preview effects on the Preset video output, select the **Preview Effect on PST** check box. The **Background Source** will be forced to **External Background** and cannot be changed. In addition, the Preview will apply to all 16 effects.

The second channel can only be used in 1 mode; in other words, **Dual Channel Effect** in the Channel section and **Preview Effect on PST** are mutually exclusive.

Selecting a Channel to Edit (Adding a Second Channel to an Effect to Squeeze the PGM and PST Video)

To add a second channel to an effect to squeeze the PGM and PST video, select the **Dual Channel Effect** check box, select the **Preset** radio button, and then follow the procedure as described above. You can edit the effect after you have created it, by first selecting the appropriate channels box.

Changing a Background Source

Note

If **Preview Effect on PST** is selected, you will not be able to select a background source.

For each effect, the background source can be changed through the pull-down **Background Source** box.

For a single channel effect, your choices are

- Preset
- External Background

For a 2-channel effect, when neither channel is full size, the **Background Source** will be forced to **External Background** and cannot be changed.

Changing a Crop Size

1. In the Crop box, check the **Enable Crop** check box. The **Left**, **Right**, **Top**, and **Bottom** spin boxes will be enabled.
2. Enter the new percentage for each crop value. The range of values ranges from 0 to 100%.

Changing the Position of a Channel

1. Select the appropriate segment in the **Segments** field for the effect being edited. When a segment is highlighted in the **Segments** field, the **Position** spin box is enabled.
1. Under the **Squeeze** → **Position** box, click the **H** (horizontal) or **V** (vertical) position box.[1]
2. Enter the new percentage for the position value. The range of values ranges from -100% to +100%.

[1] Position values always refer to the full, uncropped size.

Changing the Squeeze Ratio of a Channel

1. Select the appropriate segment in the **Segments** field for the effect being edited. When a segment is highlighted in the **Segments** field, the **Ratio** spin box is enabled.
2. Unclick the **Maintain Aspect Ratio** check box.
3. Under the **Squeeze** → **Ratio** box, click the **H** (horizontal) and/or **V** (vertical) box, and then enter a new ratio value(s). The range of values ranges from 0% to +100%. You can see a thumbnail view of the ratio of the squeeze on the Effects dialog box.
4. Under the **Squeeze** → **Position** box, click the **H** (horizontal) and/or **V** (vertical) box, and then enter a new position value(s). The range of values ranges from -100% to +100%. You can see a thumbnail view of the position of the squeeze on the Effects dialog box.

Creating L-Bars

1. Select the appropriate segment in the **Segments** field for the effect being edited.

   When a segment is highlighted in the **Segments** field, the **Ratio** spin box is enabled.
2. Under the **Squeeze** → **Ratio** box, click the **H** (horizontal) and/or **V** (vertical) box, and then enter a new ratio value(s).

   The range of values ranges from 0% to +100%. Setting the H value to 0 will set the L-bars to appear at the top left corner of the display. You can see a thumbnail view of the ratio of the squeeze on the Effects dialog box.

Creating Wipes

1. Select the appropriate segment in the **Segments** field for the effect being edited.

   When a segment is highlighted in the **Segments** field, the **Ratio** spin box is enabled.
2. Under the **Squeeze** → **Position** box, click the **H** (horizontal) box, and then enter a position value of 100.

   This value will cause a wipe effect on screen.

Quick Select Settings

Quick Select recalls the stored appearance of either the PST or the PGM monitor.

A Quick Select is a snapshot of the state of the various portions of your system. The Quick Select dialog box has four tabs which allow you to select combinations of the following items:

- Both external keys
- Both audio overs

- **Logo Key 3** through **Logo Key 6** states and/or contents (not available with IconMaster Lite license)
- Aux bus functions
- Transition functions

To configure a Quick Select:

1. Choose whether you will recall the PST state or the PGM state.

   Regardless of which state you will recall, the complete set of data is stored.

   - **Recall Saved PST State**: Recalls whatever is on the Preset monitor at the time that the Quick Select is made
   - **Recall Saved PGM State**: Recalls whatever is on the Program monitor at the time when the Quick Select is made

   The PST/PGM state selection is a global selection that is made for all Quick Selects.

2. Go through the four tabs of the **Quick Selects** dialog box, making selections for Quick Selects 1-8. Each row in the table represents a single Quick Select.

Note

Each Quick Select can be named. The name assigned to a Quick Select appears on the parametric Control cluster, on the ISCP, and on any Quick Select button that is assigned on the HRCP.

   The contents of these tabs are described in the following sections.

   - “Quick Selects for External Keys” on page 166
   - “Quick Selects for Internal Logo Keys” on page 166
   - “Quick Selects for Aux Buses” on page 168
   - “Quick Selects for Transitions” on page 168

   By default, all options on these tabs are selected, except for the Auto Take option on the Transitions tab.

3. When you are satisfied with your Quick Selects choices, save and upload to your IconMaster frame.

Back at your Control Panel, after the revised ICU file has been uploaded, when you store and recall Quick Selects, the snapshots that are captured will reflect the settings made on these screens.

Quick Selects for External Keys

The External Keys tab of the Quick Select Configuration dialog box has options for recalling both the visual and audio portions of the two external keyers.

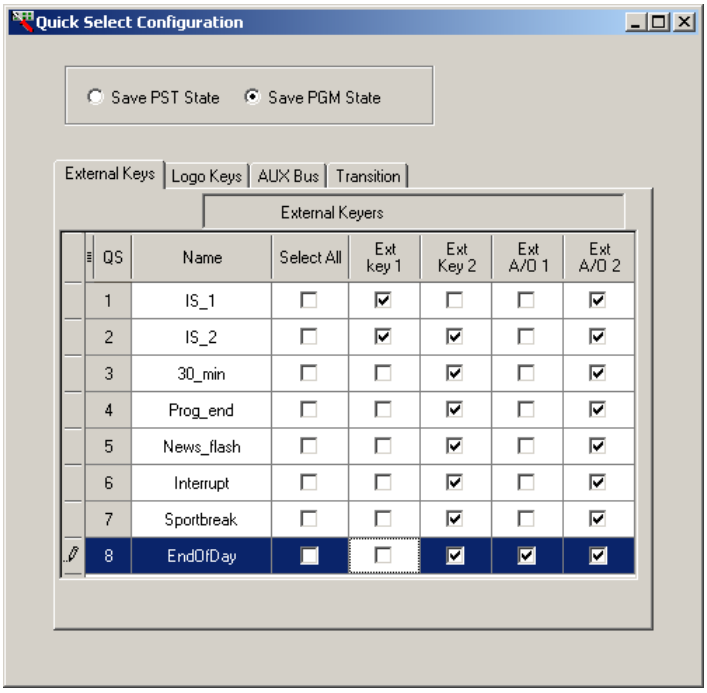


Figure 7-16. External Keys Quick Select Dialog Box

When you enable **External Keys** selections, you recall the state of the settings assigned to the keyer at the time the quick select was saved. You can enable or disable selected keyers, which will remove those keyer functions from the corresponding quick select.

When there is a check mark for Ext Key 1 and Ext Key 2 for a Quick Select, that quick select will store and recall the visual conditions of that keyer, including its transparency, screen location, etc.

When there is a check mark for Ext A/O 1 and Ext A/O 2 for a Quick Select, that quick select will store and recall those external audio overs.

Click **Select All** to select both external logo keys and both audio overs on that Quick Select. Click **Select All** again to unselect all components of both external logo keys and both audio overs for that Quick Select (row).

Quick Selects for Internal Logo Keys

Each of the four internal logo keys can have its state and/or its content saved as part of a Quick Select.

Note

If you have an IconMaster Lite license key, options for Internal Keys will be unavailable.

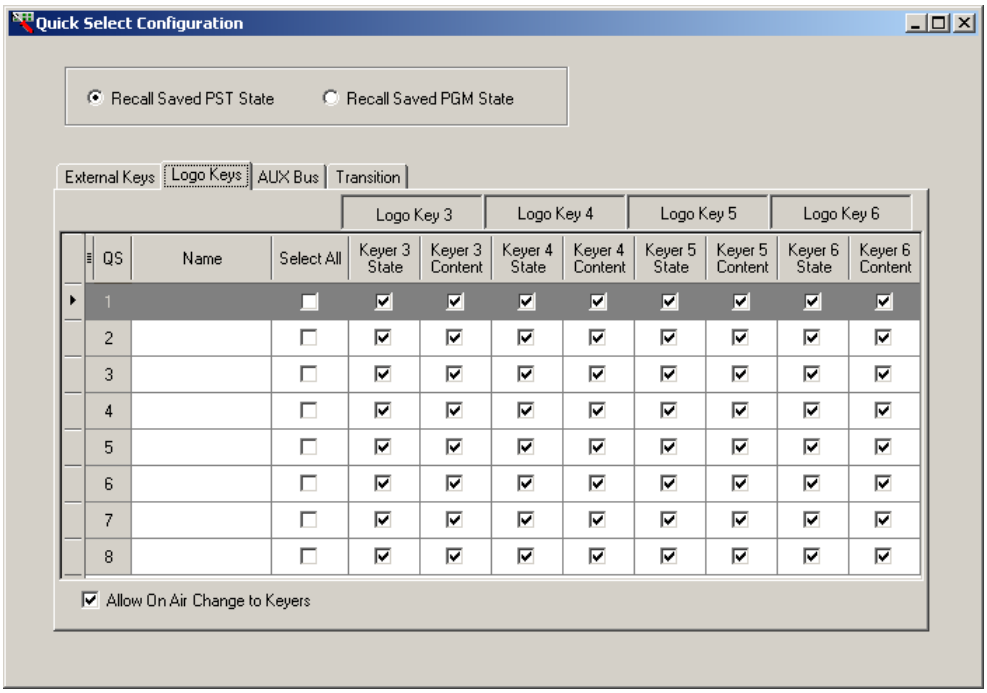


Figure 7-17. Logo Keys Quick Select Dialog Box

For Logo Keys 3- 6, you can choose to store and then the the state and/or content as part of the Quick Select. Selecting the Select All box will store state and content for all keyers for that quick select.

Table 7-5. Settings for Each Internal Keyer

Keyer Setting	Function
Keyer (3 - 6) state	Whether the keyer is on or off
Keyer (3 - 6) content	The Logo #, Transparency, processing, etc. that are applied to that internal keyer

Select All will select all internal logos for that quick select. Each of the check boxes in the quick select row indicated whether the function listed at the top of the dialog box will be recalled during that quick select operation.

If you select the **Allow On-air Changes to Keyers** check box, when the data stored in this Quick Select is recalled, the keyers will be updated on the PGM monitor. If this check box is not selected, Then when the Quick Select is recalled, the contents of the keys that are currently on the PGM monitor will not change. This will not change the state of the keys, though, and the keys can still come off air. This setting is a global setting that applies to all Quick Selects, for example to protect station branding.

Quick Selects for Aux Buses

For each Quick Select, you can choose to recall the contents of any or all of the 12 Aux buses.

Note

To avoid excess router switching traffic during a quick select recall, deselect all unnecessary Aux busses in quick selects that are in use.

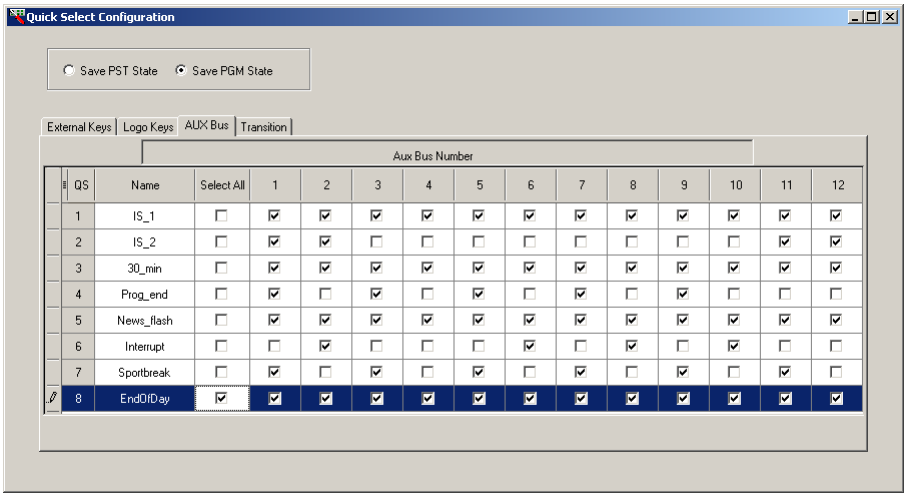


Figure 7-18. Aux Bus Keys Quick Select Dialog Box

Click **Select All** to select all the Aux Buses for that particular Quick Select. Click Select All again to unselect all the Aux Buses.

Quick Selects for Transitions

The **Transition** tab of the Quick Select Configuration dialog box has options

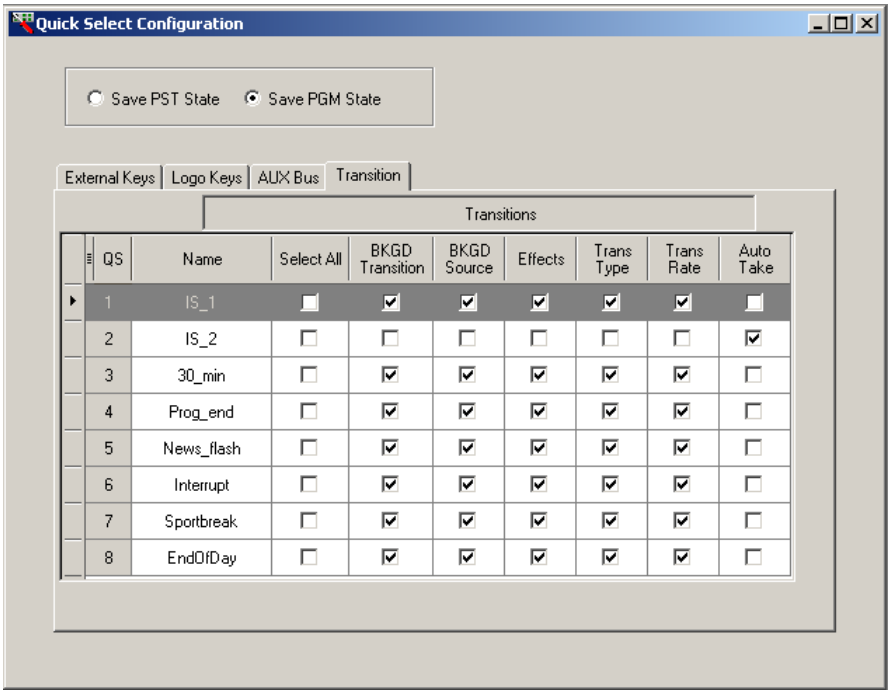


Figure 7-19. Transitions Quick Select Dialog Box

By selecting a Transition check box, you recall the state of the transition settings, as described in Table 7-6.

Table 7-6. Quick Selects Options for Transitions

Quick Select Option	
Background Transition	Saves and recalls the state of the BKGD button on the control panel
Background Source	The source that is on the Preset bus (whether the background is on or off)
Effects	All effects that are set on the transition
Transition Rate	The preset duration for transitions
Transition Type	The shape of the transition

Click **Select All** to enable all transition features for that quick select. Click **Select All** again to unselect all transition features for that Quick Select.

If **Auto Take** is selected, when the Quick Select is recalled to the PST, and a take is activated to send the PST content to the PGM. The previously shown PST content is not preserved. If **Auto Take** is not selected, you can achieve the same effect by pressing Take on the Control Panel.

Note

A breakaway transition cannot be saved in a Quick Select.

Audio Cluster Settings

Figure 7-20. Audio Cluster Dialog Box[1]

An Audio Cluster is a group of audio channels whose gain can be adjusted as a group. A cluster can have up to 16 audio channels. The number of outputs corresponds to the number of audio channels selected at the Audio Configuration dialog box (see page 148). Typically, a cluster is a grouping of similar audio channels, such as MAIN+SAP or SURROUND (6 channels).

In the Audio Cluster dialog box, you can setup up to 8 audio clusters by selecting the audio channels you wish to group together. A specific audio channel can appear in more than one cluster. (For example, in Figure 7-20 audio channels 3 and 4 appear in the Clust2 clusters; audio channels 7 and 8 appear in the Clust4 clusters.) The cluster name can be edited by selecting the name field, and then typing a new name.

The default setting is for an audio cluster to be the same as an AES audio channel pair. This means cluster 1 is AES channel pair 1, cluster 2 is AES channel pair 2, etc.

Audio Cluster gain is adjusted directly from the IconMaster RCP control panel's optional audio control panel.

[1] This dialog box is for use with the optional IconMaster audio control panel.

Keyer Settings

The Keyer dialog box allows you to give a name to the external keyers. These names are displayed on the keyer LCD displays of the RCP control panel.

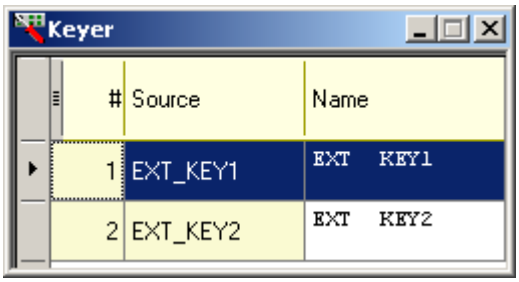


Figure 7-21. Keyer Dialog Box

Changing a Keyer Input Source Name

To change the Name of the input source, double-click the name in the cell, and then enter a new name. The length of the name is limited to 10 characters (including spaces), over 2 lines, with a maximum of 5 characters per line.

Control Group Settings

The **Control** group on the left side of the IconMaster configuration software screen includes the following dialog boxes: Machine Control and GPI-GPO.

Figure 7-22. Control Menu Group

This menu group controls the machine control and GPI-GPO configuration functions, as shown in Figure 7-22.

Machine Control Settings

The Machine Control dialog box allows you to set the appropriate control functions for automation.

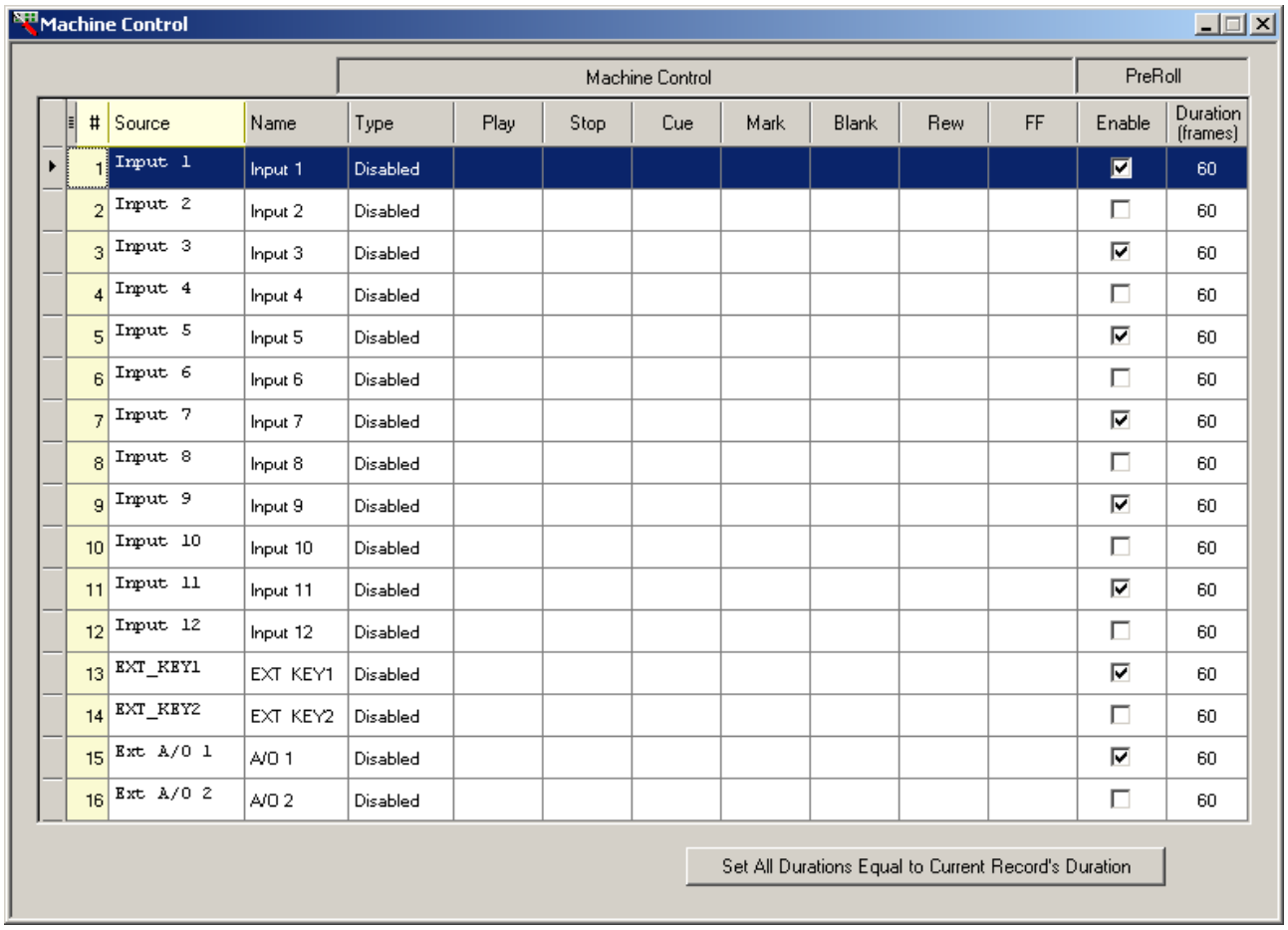

Machine Control
Machine Control
PreRoll
Source Name Type Play Stop Cue Mark Blank Rew FF Enable Duration (frames)
1 Input 1 Input 1 Disabled 60
2 Input 2 Input 2 Disabled 60
3 Input 3 Input 3 Disabled 60
4 Input 4 Input 4 Disabled 60
5 Input 5 Input 5 Disabled 60
6 Input 6 Input 6 Disabled 60
7 Input 7 Input 7 Disabled 60
8 Input 8 Input 8 Disabled 60
9 Input 9 Input 9 Disabled 60
10 Input 10 Input 10 Disabled 60
11 Input 11 Input 11 Disabled 60
12 Input 12 Input 12 Disabled 60
13 EXT_KEY1 EXT KEY1 Disabled 60
14 EXT_KEY2 EXT KEY2 Disabled 60
15 Ext A/O 1 A/O 1 Disabled 60
16 Ext A/O 2 A/O 2 Disabled 60
Set All Durations Equal to Current Record's Duration

Figure 7-23. Machine Control Dialog Box

Using the Machine Control functions, you can perform the following actions:

- Coordinate GPI/GPO and machine control events
- Select the automation type
- Select the machine control settings
- Temporarily disable selected machine control settings

The **Source** column indicates the selected source. This column is read-only; you cannot make changes here.

The **Name** column indicates the selected sources' name. This column is read-only; you cannot make changes here.

Configuring GPI/GPO Events to Machine Control

If you configure GPI or GPO events to machine control, you must ensure both GPI/GPO and Machine Control settings are set up correctly. See Figure 7-24 for the coordinating GPI-GPO and Machine Control settings.

Note

GPOs and GPIs can use the external interfaces. When using an external interface, 48 additional GPOs and 48 additional GPIs are available.

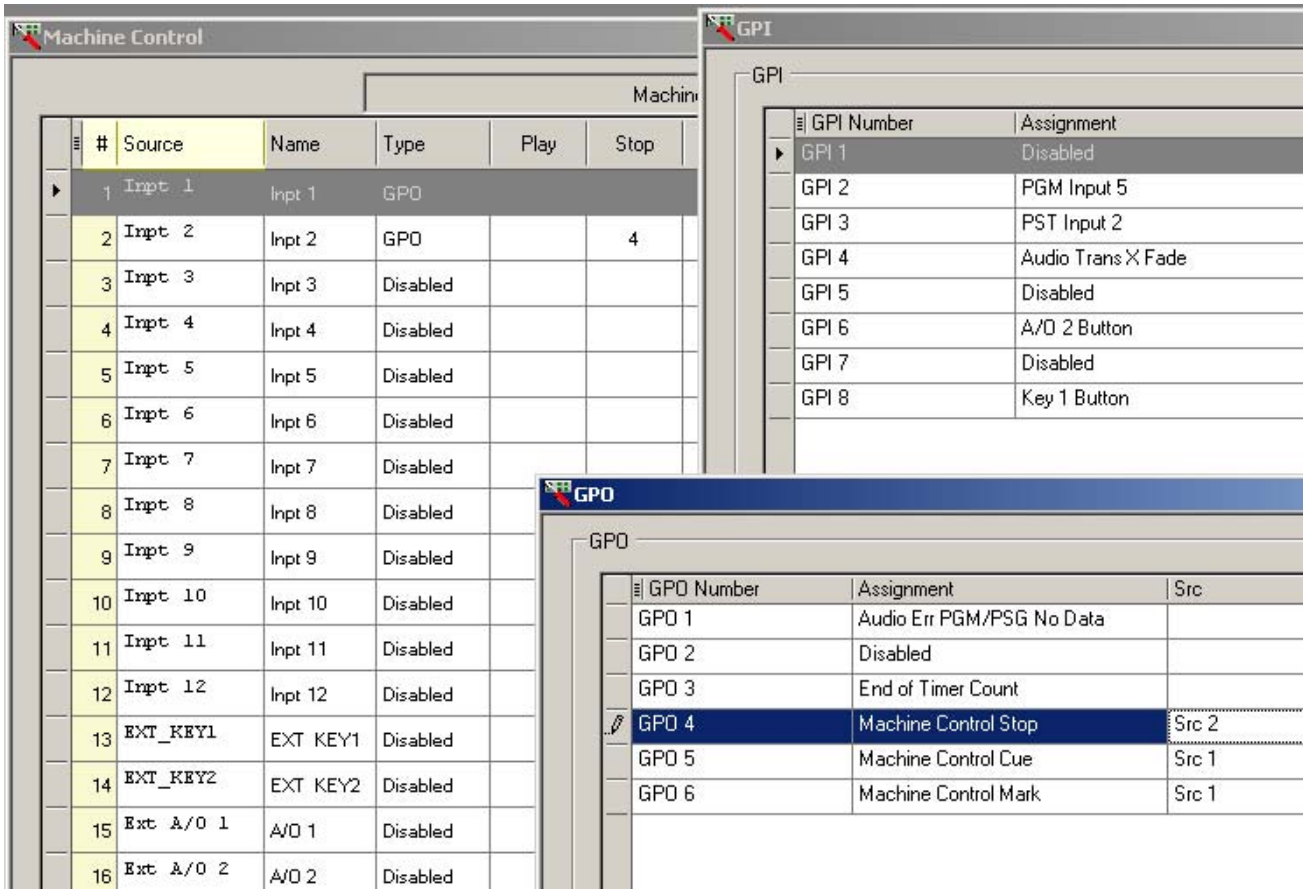

Machine Control
Machin
Source Name Type Play Stop
1 Inpt 1 Inpt 1 GPO
2 Inpt 2 Inpt 2 GPO 4
3 Inpt 3 Inpt 3 Disabled
4 Inpt 4 Inpt 4 Disabled
5 Inpt 5 Inpt 5 Disabled
6 Inpt 6 Inpt 6 Disabled
7 Inpt 7 Inpt 7 Disabled
8 Inpt 8 Inpt 8 Disabled
9 Inpt 9 Inpt 9 Disabled
10 Inpt 10 Inpt 10 Disabled
11 Inpt 11 Inpt 11 Disabled
12 Inpt 12 Inpt 12 Disabled
13 EXT_KEY1 EXT KEY1 Disabled
14 EXT_KEY2 EXT KEY2 Disabled
15 Ext A/O 1 A/O 1 Disabled
16 Ext A/O 2 A/O 2 Disabled
GPI
GPI
GPI Number Assignment
GPI 1 Disabled
GPI 2 PGM Input 5
GPI 3 PST Input 2
GPI 4 Audio Trans X Fade
GPI 5 Disabled
GPI 6 A/O 2 Button
GPI 7 Disabled
GPI 8 Key 1 Button
GPO
GPO
GPO Number Assignment Src
GPO 1 Audio Err PGM/PSG No Data
GPO 2 Disabled
GPO 3 End of Timer Count
GPO 4 Machine Control Stop Src 2
GPO 5 Machine Control Cue Src 1
GPO 6 Machine Control Mark Src 1

Figure 7-24. Coordinating Machine Control and GPI/GPO Settings

Selecting Automation Types

The **Type** column indicates if the input you have selected (**1** through **12**) will trigger **GPO**s (GPI Outputs), **Serial** protocol, or—through the **Disabled** option— normal functionality of the selecting source. The GPO configuration is common for all input types. If you have selected a GPO that is already configured in the GPI-GPO dialog box, a message will warn you that this action will affect the settings of your previously configured GPO.

The **GPO** option offers sources **1** to **13** and the **Serial** offers device IDs **0** to **31**. When **Serial** is selected, the Device ID value becomes the same for all functions.

Selecting Machine Control Settings

If you have selected **GPO** or **Serial** as automation type, the Machine Control columns (**Play, Stop, Cue, Mark, Blank**, **Rewind**, and **Fast Forward)** are enabled, and you may select values from the drop-down list boxes.

Disabling Machine Control Settings

Select the **Disabled** check box to temporarily disable any **Machine Control** settings you have made. (This is the default setting for the Automation Type.)

Preroll Functions

Using the **Preroll** functions, you can perform the following actions:

- Enable the preroll status
- Set or reset the preroll duration

Enabling Preroll Status

The **Enabled** check box enables the preroll status for that output. If you select **Enabled**, but have **Disabled** selected under **Type**, no action will occur.

Setting/Resetting Preroll Duration

The **Preroll Duration (Frames)** sets the duration of the preroll from 0 to 600 frames. The default value is 60.

To make all of the preroll times match the preroll time of the selected item, press **Set All Durations Equal to Current Record's Duration**.

GPI Settings

To use external GPIs, you must first enable them on the ICU Network page (see page 189), and configure the JLCooper eBOX (see their documentation for details).

Note

If configuring an IconMaster LITE, fewer GPI and GPO selections are available. IconMaster LITE has 8 GPI and 6 GPO.

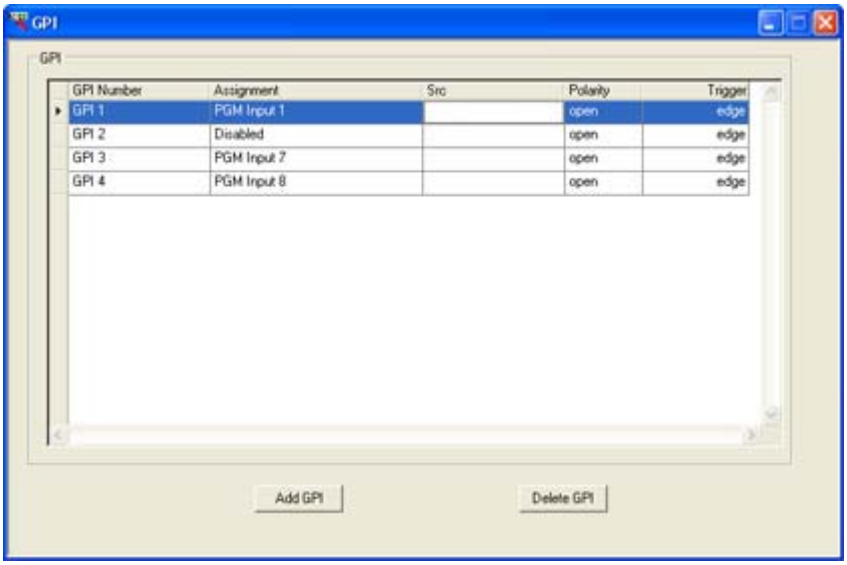


Figure 7-25. GPI Settings Dialog Box

Using the GPI dialog box, you can perform the following actions:

- Add or delete a General Purpose Interface input (GPI)
- Assign a trigger to a GPI source (GPI sources are assignable to Quick Selects, Bus selections, and different transition types and rates)
- Coordinate GPI and machine control events
- Specify polarity of the GPI
- Set up the trigger function
- Choose what interface the GPI comes from

Adding a GPI

To add a GPI:

1. Click **Add GPI** at the bottom of the **GPI** dialog box.

   A new row appears in the GPI table.

2. Click the **GPI Number** field to open a drop-down menu, and then choose a GPO.

3. Click the **Assignment** field to open a drop-down menu, and then choose one of the many possible triggers.

Table 7-7. GPI Assignment Options

Options	
Disabled	
PGM input (1 - 12)	PST input (1 - 12)
Video Trans X Fade	Audio Trans X Fade
Video Trans V fade	Audio Trans V Fade
Video Trans Cut Fade	Audio Trans Cut Fade
Video Trans Fade Cut	Audio Trans Fade Cut
Video Trans Rate	Audio Trans Rate
Preroll Button	Take Button
FTS Button	FTB Button
Key to Air	AO to Air
BKGD Button	Key (1 - 6) Button
A/O (1 - 2) Button	Quick Select (1 - 8) Button

Any changes you make to each GPO Assignment drop-down menu automatically are reflected in the GPO drop-down box in the Keyer dialog box.

Note

Key to Air and **AO to Air** are new GPI functions in IconMaster 3.1. They allow a keyer or Audio Over to be active on air as long as the GPI is active. These are recommended for use with EAS systems, where the EAS alert system can drive a GPI on the IconMaster to enable the Audio Over content coming from the EAS system.

4. Type a source in the **SRC** field.
5. In the **Polarity** column, set the GPO to **Open** or **Closed**.
6. Set the trigger function.
   - For GPI 1-8 set the Trigger setting to **Edge** or **Level.**
   - For GPI 9-18 the Trigger setting can only be set to **Edge**.

   The examples below provide a scenario where a GPI source is used to select between 2 assignments (A and B):
   - If Open polarity is used for the Level option:
     - When the Polarity = Closed (not set) and Trigger = Level, select source A.

- When the Polarity = Open (set) and Trigger = Level, select source B.

- 2. If Open polarity is used for the Edge option:
  - When the polarity changes from Closed to Open and Trigger = Edge, switch from source A to source B. Nothing happens when the polarity changes back from Open to Closed.
  - When the polarity changes again from Closed to Open and Trigger = Edge, switch from source B to source A. Nothing happens when the polarity changes back from Open to Closed.

Deleting a GPI

To delete a GPI, highlight the entry you want to remove, and then click the **Delete GPI** button.

GPO Settings

To use external GPOs, you must first enable them on the ICU Network page (see page 189), and configure the JLCooper eBOX (see their documentation for details).

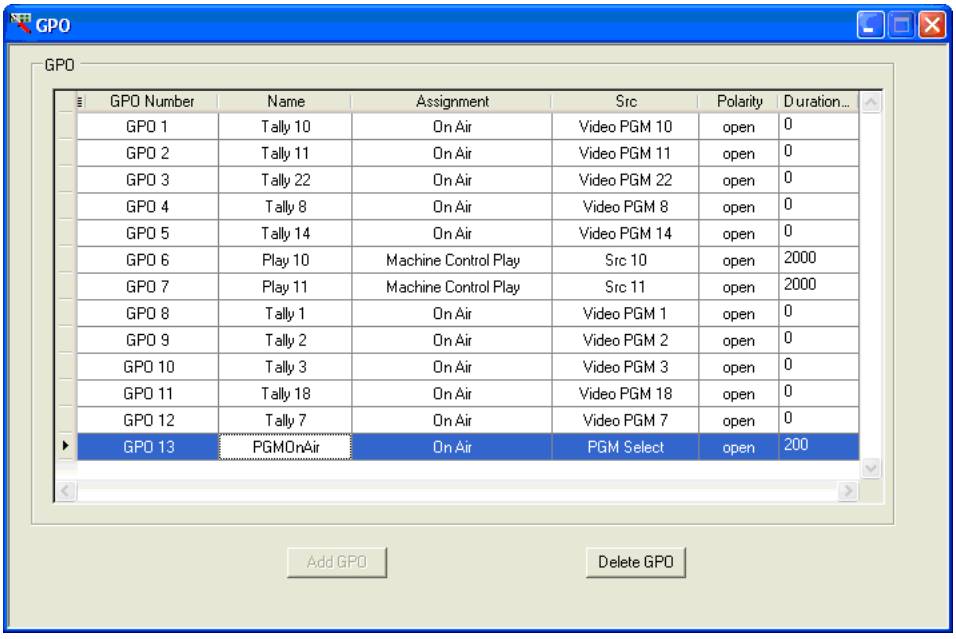

GPO
GPO
GPO Number
Name
Assignment
Src
Polarity
Duration...
GPO 1 Tally 10 On Air Video PGM 10 open 0
GPO 2 Tally 11 On Air Video PGM 11 open 0
GPO 3 Tally 22 On Air Video PGM 22 open 0
GPO 4 Tally 8 On Air Video PGM 8 open 0
GPO 5 Tally 14 On Air Video PGM 14 open 0
GPO 6 Play 10 Machine Control Play Src 10 open 2000
GPO 7 Play 11 Machine Control Play Src 11 open 2000
GPO 8 Tally 1 On Air Video PGM 1 open 0
GPO 9 Tally 2 On Air Video PGM 2 open 0
GPO 10 Tally 3 On Air Video PGM 3 open 0
GPO 11 Tally 18 On Air Video PGM 18 open 0
GPO 12 Tally 7 On Air Video PGM 7 open 0
GPO 13 PGMOnAir On Air PGM Select open 200
Add GPO
Delete GPO

Figure 7-26. GPO Settings Dialog Box

Using the GPO (GPI out) dialog box, you can perform the following actions:

- Add or delete a General Purpose Interface output (GPO)
- Name a GPO
- Assign a trigger to a GPO source
- Specify the polarity

- Set the duration

Setting Operation Precedence

If an IconMaster GPO is assigned on the GPO page of ICU, it will take precedence over the GPO operations if the same GPO is assigned to an RCP soft LCD button. In this case, the RCP soft LCD button will have no effect. Thus, if you wish to assign a GPO to an RCP soft LCD button, the GPO's setting on the GPI-GPO page of ICU should be set to **Disabled**.

Adding a GPO

To add a GPO:

1. Click **Add GPO** at the bottom of the **GPO** dialog box.

   A new row appears in the GPO table.

2. Click the **GPO Number** field to open a drop-down menu, and then choose a GPO.
3. Enter a logical name in the **Name** column.

   This name will be shown on the RCP panel, to remind operators what the GPO will do.

4. Click the **Assignment** field to open a drop-down menu, and then choose one of the many possible triggers.

   Any changes you make to each GPO Assignment drop-down menu automatically are reflected in the GPO drop-down box in the Keyer dialog box.

5. Click the **SRC** field to open a drop-down menu, and then choose a source.
6. In the **Polarity** column, set the GPO to **Open** or **Closed**.
7. In the **Duration** column, type the duration of the GPO.

   The maximum duration is 900 ms. To have the GPO stay on, leave the Duration cell empty.

If you configure GPO events to machine control, on the **Machine Control** dialog box, you must ensure that machine control is enabled for that **GPO** is enabled under the **Type** column, and that **Preroll** is **Enabled** for sources that have a GPO trigger assigned. See page 172 for more information.

Deleting a GPO

To delete a GPO, highlight the row you want to remove, and then click **Delete GPO**.

System Config Group Settings

The **System Config** group on the left side of the IconMaster configuration software screen includes the following dialog boxes: Genlock and Standard, Router Control, System Config, Automation Config, and Network.

Figure 7-27. System Configuration Menu Group

This menu group controls the genlock/standard, router, system, automation, network, license management, serial port, clock and timer, and CENTRIO configuration functions, as shown in Figure 7-27.

Genlock and Standard Settings

The **Genlock and Standard** dialog is a very specific function dialog box. Using this box, you can perform the following actions:

- Select an operating standard
- Select a genlock source type
- Set the timing for the IconMaster system

- Get the timing report for the IconMaster system

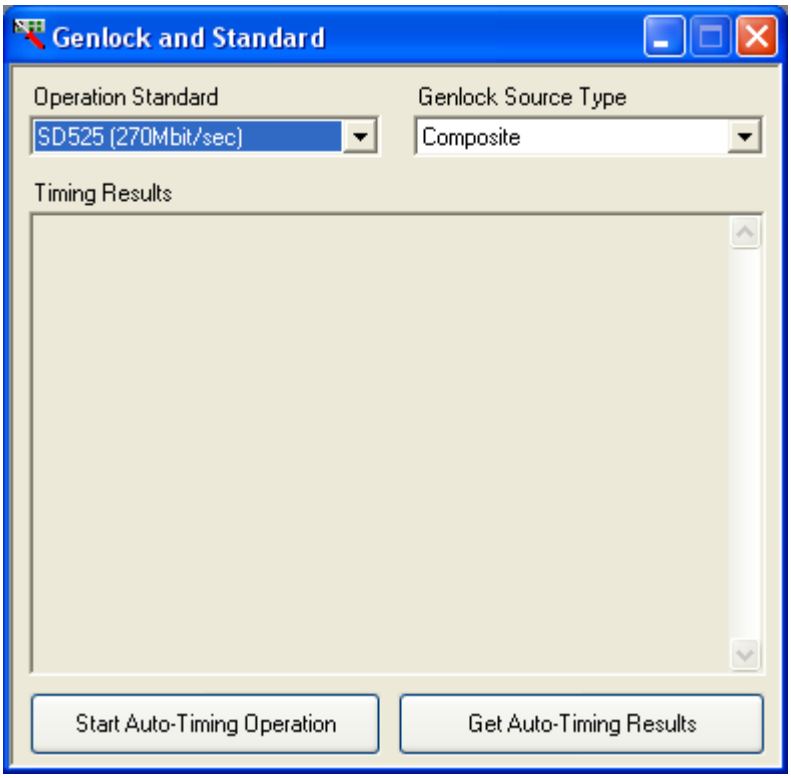


Figure 7-28. Genlock Dialog Box

Selecting an Operating Standard

To select an operating standard, select the required standard from the **Operation Standards** pull-down menu.

Selecting a Genlock Source Type

Select either **Composite** or **Tri-Level** from the **Genlock Source Type** pull-down menu. The default **Genlock Source Type** is **Composite**.

Adjusting the IconMaster System Timing

Note

Do not initiate a timing setup until all source inputs and destinations have been assigned in the primary inputs page, the appropriate configuration file has been applied to the IconMaster, and all input signals are applied and stable.

1. Press the **Set Auto-Timing Operation** button, and then click **Yes** after confirming all keyers are in an off-air state.

This action causes the IconMaster system to adjust the horizontal and vertical phase of the reference input so that the most number of inputs have their vertical timing value at zero. The results of this function are *not* displayed in the **Timing Results** area. Ensure that the external keys are taken off-air before you run the **Set Timing** procedure.

2. Allow the Timing operation to run for 1 minute.
3. Press the **Get Auto-Timing Results** button to retrieve the new timing reading from the IconMaster.

Note

The system phase values let you know how much the reference input had to be delayed so that the video inputs would be within a 1 video line of the reference input.
The **Get Timing** results are not a real-time indication of each input's timing offset. If an input's timing has changed, you must activate **Set Timing** again to retrieve the current results.

These results will be displayed in the **Timing Results** area. If external keys are on air when the Timing operation is initiated, the Timing results will show an error message, indicating that the timing setup was not run, and that the external keys must be taken off-air before **Set Timing** is run again.

4. Adjust the V phase timing for any source that is reported as not timed.

   For example, if, after executing the **Set Timing** and **Get Timing** commands, you read a V phase value that equals 50, reduce the V phase timing of that input source by 50 lines.
5. Repeat steps 1 to 4 after adjusting the V phases of the sources, until all of the V phase values for the inputs are zero (i.e., the system is fully timed).

Router Configuration Settings

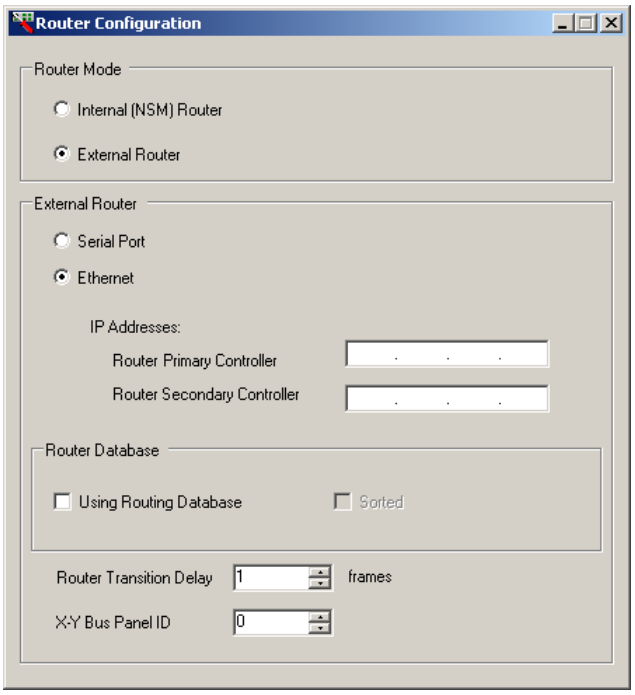


Figure 7-29. Router Configuration Dialog Box

The **Routing Configuration** dialog box (Figure 7-29) is used to set up the type of router which IconMaster uses as its primary source router.

- **Router Mode**

  If the IconMaster is configured with NSM type NEO module routers, select the **Internal (NSM) Router** setting. If any type of external router is used (Panacea, Integrator, Platinum, or third party), select **External Router**.

- **External Router**

  Choose either of the following:

  - Select **Serial Port** if you have a serial connection between the IconMaster and the router.
  - Select **Ethernet** if you have an Ethernet connection between the IconMaster and the router. When you choose this option, the selections for a router name and the IP addresses for primary and secondary controllers will become available.
  - If **Ethernet** is selected, serial port E is automatically released, and a pop up appears from ICU.

  In circumstances when you have primary and secondary router addresses configured, failover will take place.

- **Router Database**

  If the IconMaster is configured with static inputs (router sources are assigned to IconMaster inputs, without the operator ability to change the router assignments), then do not use the Router Database settings. However, if you wish to use the dynamic routing features of IconMaster, or to use an existing router database to select your IconMaster sources (regardless of Dynamic Routing use), select the **Using Routing Database** checkbox.

  - Selecting **Sorted** will optionally sort the router database alphanumerically.
  - If **Using Routing Database** is selected, you will need to create a router database using the RouterMapper software application, and then send this database to the IconMaster through the Navigator application.

    You cannot use the native RouterMapper DA4 database; you must convert it into an XML format through CCS Navigator™. See page 213 for detailed instructions.

- Set the value in the **Router Transition Delay** spin box as appropriate for your router.
- The router transition delay can be a value between 1 and 15. For Platinum routers, typically a value of “5” is required. With most other routers, the default setting of “1” will suffice. Assessment of the performance of your channel release system should be performed to ensure that the router transition delay meets your station’s requirements.

System Configuration Settings

The **22 Inputs** option is grayed out because “External Router” is set to No on the Router Configuration page. See page 182.

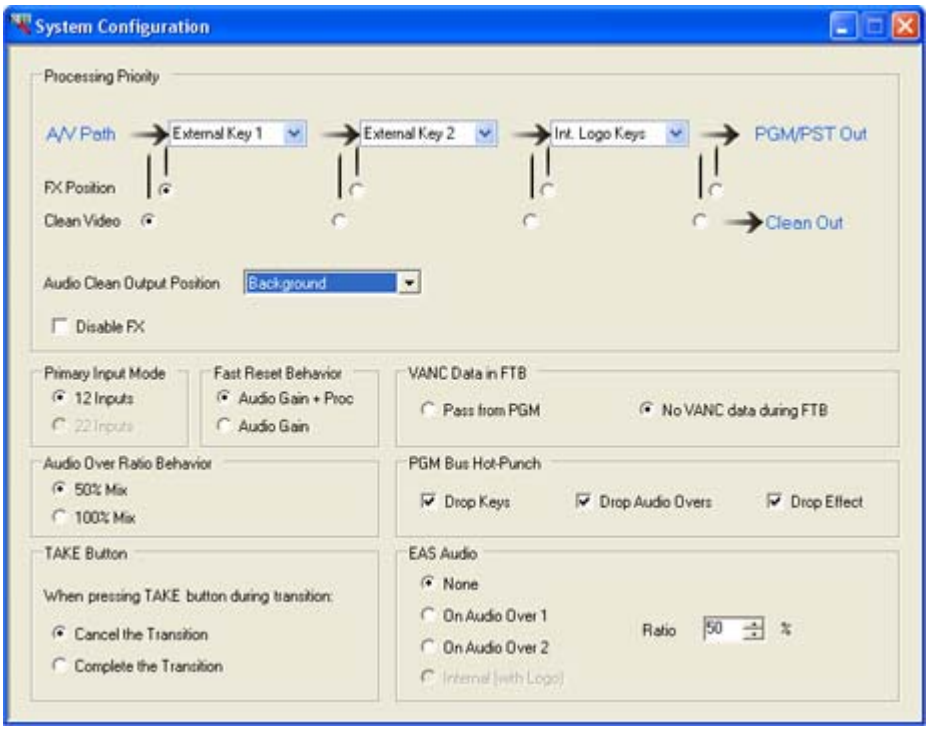


Figure 7-30. System Configuration Dialog Box

The **System Configuration** dialog box includes settings for various IconMaster system parameters, each of which is detailed below.

- **Processing Priority**

  The Processing Priority settings affect how the IconMaster routes internal video and audio signals. Keyer priority settings can be changed using the drop-down boxes in the A/V Path group. The FX priority can also be assigned.

  The IconMaster has a separate Clean output which can be assigned as well. The video and audio pick positions for the Clean output can be set in the Processing Priority settings.

- If the **Disable FX** checkbox is checked, the IconMaster FX squeezeback effects engine will be disabled.

- **Primary Input Mode**

  This setting affects whether 12 or 22 primary inputs are available to IconMaster.

  - If **12 Inputs** is selected, the 12 primary source input buttons will select between all available input sources.

- If **22 Inputs** is selected, the primary source buttons will be split into one group of inputs numbered 1 – 11, and another group numbered 12 – 22. The far right primary source button will be used as the **SHIFT** button. When set to **22 Inputs** mode, the **SHIFT** button toggles between 1 – 11 and 12 – 22.

Note

It is strongly suggested that you retime the IconMaster system if you change from 12 to 22 input mode. This will ensure the additional 10 inputs are correctly timed into IconMaster. See page 179 for information on setting the timing for an IconMaster system.

- **Fast Reset Behavior**

  This setting allows you to quickly reset audio gain and/or **PROC** parameter settings for an IconMaster input source, internal or external keyer, Audio Over, or audio control item on the Audio Control Panel.

  There are three separate operations that are enabled when the Fast Reset function is selected: **SET**, **CLEAR**, and **RECALL**. If the **SET** function is enabled, the parameter will not be reset, but its current value will be saved as the source's user-saved reset value. This is the value that will be used during a **RECALL** operation. If the **CLEAR** function is enabled, the user-saved reset value will be cleared (back to factory value), and the keyer's parameters will also be reset back to this factory value. If the **RECALL** function is enabled, the user-saved reset value set up through a **SET** operation will be applied.

  Reset values can be either a factory reset values (0 dB gain, and default keyer values), or can be user-saved reset values, which are saved on a source-by-source basis for audio gains and on a keyer-by-keyer basis for keyer settings.

  - If **Audio Gain + Proc** is selected, the IconMaster will reset the audio gains of the selected source or audio configuration item to unity. It also resets all **PROC** audio input parameters to their original default values.
  - If **Audio Gain** is selected, the IconMaster will reset the audio gains of the selected source or audio configuration item to unity, but it will not reset any of the **PROC** audio input parameters.
  - When fast resetting a keyer, all keyer parameters will be reset to their defaults.
  - When fast resetting an Audio Over, the Audio Over mix ratio will be reset to 50/50.

- **Take Button**

  This setting affects the system behavior when the **TAKE** button is pressed during a transition.

- **VANC Data in FTB**

  This setting affects whether the PGM output includes VANC data from the PGM input source when the system is in the Fade to Black mode.

- **PGM Bus Hot-Punch**

  This setting defines what the IconMaster will do when a PGM bus source is hot-punched. By default, the IconMaster will drop all keys, audio overs, and all effects. By un-checking these settings, the IconMaster can be configured to retain the on-air keys, audio overs, and effects in progress.

- **EAS Audio**

  These settings affect how IconMaster responds to EAS (Emergency Alert System) triggers received.

  - If set to **None**, no audio will be altered during an EAS event.
  - If set to **On Audio Over 1** or **On Audio Over 2**, the selected audio over keyer will be turned ON during an EAS event, and turned OFF when the event completes. The Ratio setting adjusts the A/O ratio for the selected AO keyer during the EAS event.

Note

Use of **On Audio Over 1** or **On Audio Over 2** as part of an EAS event may result in an undesired on-air operation if the EAS receiver terminates the EAS message to the IconMaster before the completion of the EAS audio message. Consider using a GPO from the EAS receiver, connected to a GPI using the **Key Enable** GPI function to maintain an active Audio Over while the EAS receiver is transmitting the EAS audio message.

- **Audio Over Ratio Behavior**

  This setting allows you to specify the way the audio over ratio is interpreted by IconMaster. The default value for Audio Over ratio is 50%, which means full level mix for both AO and PGM. The 50% or 100% mix also applies to Logo Audio Overs.

  - If **50% Mix** is selected as a mode of operation, at 50% ratio the Audio Over and PGM audio each make up 50% of the mix, and the level of each will be -3 dB.

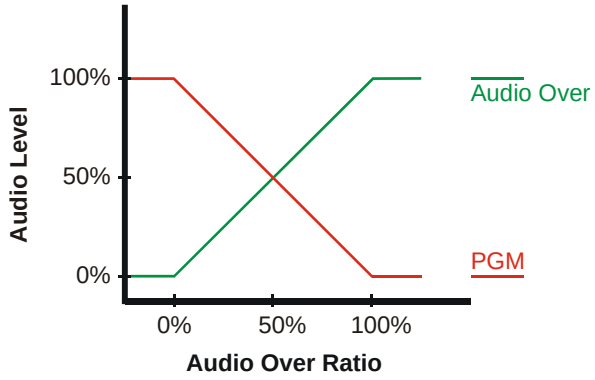


Figure 7-31. Audio Over Ratio in 50% Mix Mode

- If **100% Mix** is selected as a mode of operation, at 50% ratio the mix will be 100% of Audio Over and 100% of PGM, and will decrease respectively as you move “left” or “right” of the 50% mark.

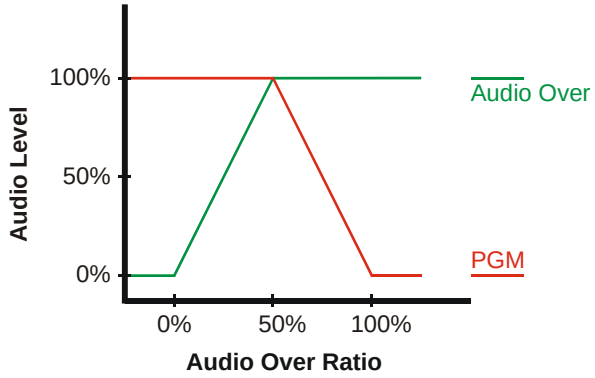


Figure 7-32. Audio Over Ratio in 100% Mix Mode

Automation Configuration Settings

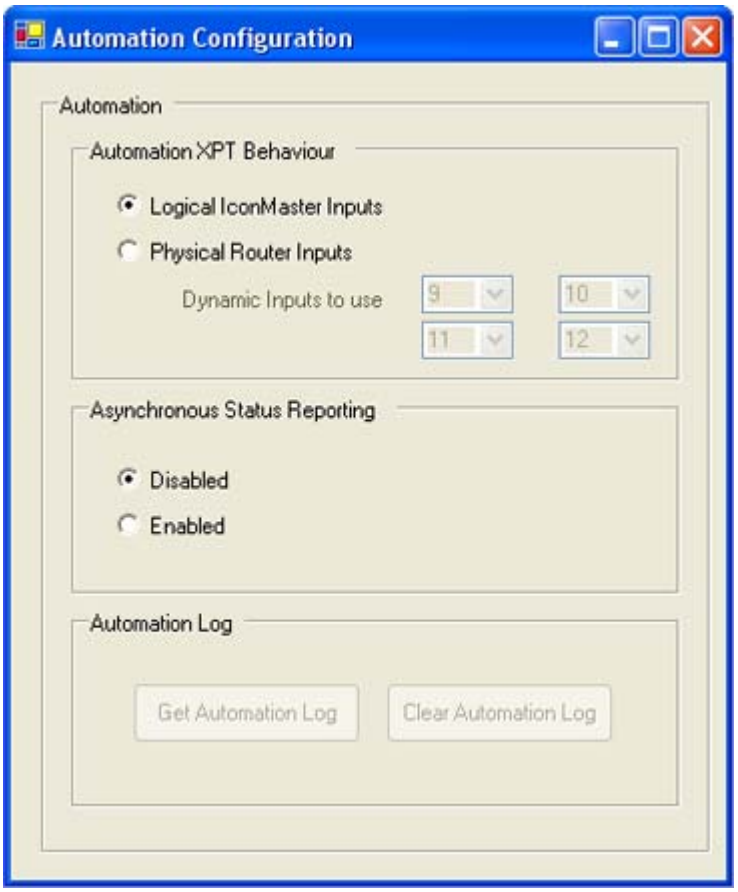


Figure 7-33. Automation Configuration Dialog Box

The **Automation Configuration** dialog box allows you to choose between logical IconMaster inputs or physical router inputs.

When you select **Logical IconMaster Inputs**, the Automation system will only be able to switch PST and PGM bus inputs that have been assigned (through the Primary Input dialog box) to inputs 1 to 12 or 1 to 22 (depending on your configuration).

When you select **Physical Router Inputs**, you can switch unassigned sources directly from a router to any four IconMaster PST and PGM bus inputs ranging from 1 to 12 (or 1 to 22) that you will select from the **Dynamic Inputs to Use** drop down list boxes. When you select an input, IconMaster will check to see if that particular input has been assigned already to any of the PGM or PST bus buttons. If not, it will assign your source the to first, or top left, drop-down input box, which corresponds to inputs 1-12 (or 1-22) on the PGM or PST bus.

Currently, **Asynchronous Status Reporting** and **Automation Log** are not supported.

Network Settings

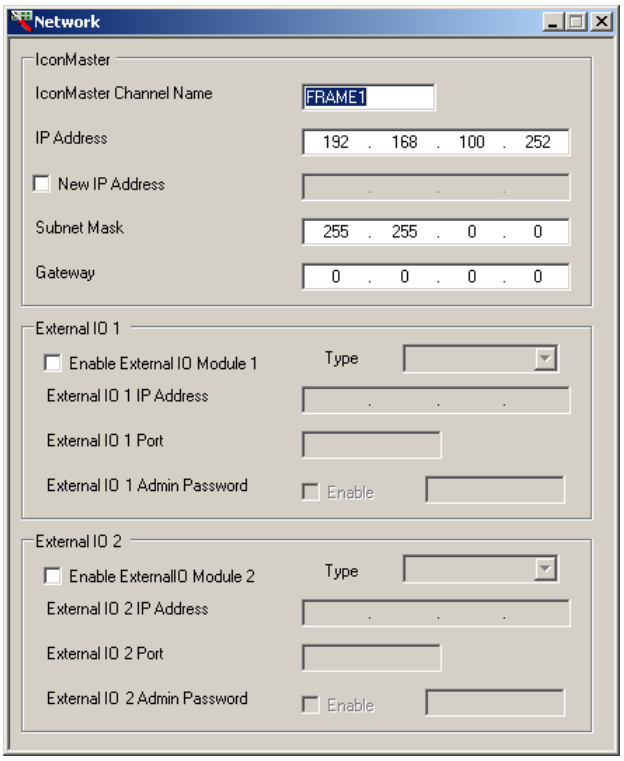


Figure 7-34. Network Dialog Box

The **Network** dialog box contains the network address settings that are necessary for the ICU program to communicate with the IconMaster's MKE-3901 module, and for the MKE-3901 to communicate with IconMaster's RCP control panels. It also contains selections for external interface devices (such as the JLCooper Electronics eBox® Quad Serial to Ethernet Interface[1]) and their corresponding network address settings.

You can rename each frame that contains IconMaster components by clicking in the **Iconmaster Channel Name** field, and then typing the new name. A maximum of 8 characters is allowed for a host name.

The default network IP address of the IconMaster's MKE-3901 module is **192.168.100.252**.

- If this address has not been changed on the MKE-3901 module, then this setting should not be changed.
- If you have changed the IP address of the MKE-3901 using the module's card-edge display, enter the new IP address in the **IP Address** field.

[1] eBOX is a trademark of JLCooper Electronics.

If you are communicating correctly with the MKE-3901 module, and wish to change the IP address using the ICU software, select the **New IP Address** checkbox, and then enter a new IP address in the field to the right. The Subnet Mask and Gateway settings can also be set in this way.

Note that after changing the MKE-3901 module's IP address, you will need to power cycle the IconMaster's MKE-3901 module, and put the new address into the **IP Address** field above.

You can connect to two external input/output devices through the boxes labeled **External IO 1** and **External IO 2**.

1. Select the **Enable External IO Module** checkbox, and then select the external device type from the drop-down list box.
2. In the corresponding list boxes, enter an IP address and a port number for the external device.
3. (Optional) Enable the External IO Admin Password checkbox, and then enter the appropriate system administrator pasword.

If the External IO 1 or External IO2 is enabled, additional GPO and GPI functions will become available in the GPO and GPI pages on page 175 and page 177.

See the JLCooper instruction manual for information on configuring the eBox for use with IconMaster.

License Management Settings

The License Management dialog box contains information about license keys installed on your IconMaster systems.

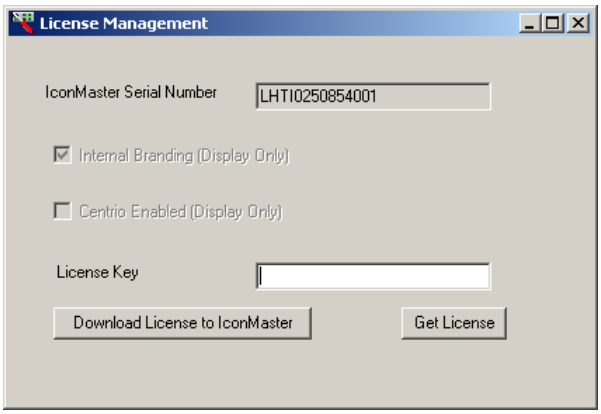


Figure 7-35. License Management Dialog Box

There are two licences for Iconmaster. The first licence enables Iconmaster to integrate with the Centrio multi-viewer. the second licence option enables the INTERNAL keyers functionality of the Iconmaster, if an MGI3902 or MGI3903 board is installed.

To add a license key:

1. In the License Management dialog box, click **Get License**.

The I**conMaster Serial Number** field updates. If a license key is currently installed on the MKE-3901 board, the **License Key** field also updates.

2. Provide the IconMaster serial number to your Customer Service representative.

   There are two ways to provide the serial number and receive your license key:

   - By phone: Contact your Sales representative.
   - By faxing or mailing a form to Harris: This form is available by clicking **License Form**. The form includes information on where it should be sent. (Acrobat Reader is required.)

3. Enter the provided key in the License Key field.

   Your license should be recognized immediately. You must restart the IconMaster frame when the system is converted from IconMaster Lite to IconMaster.

Serial Port Configuration Settings

Note

The JL Cooper external interfaces include configuration options for RS232 or RS422 operation, and are configured on the external interface, not within ICU.

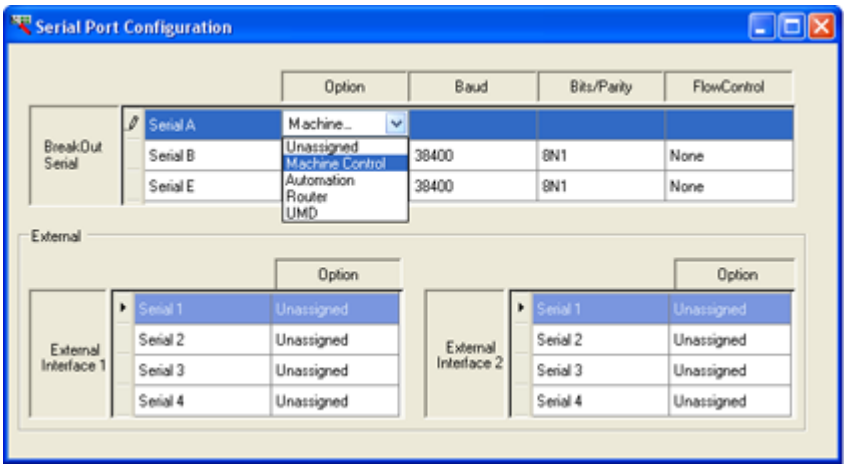


Figure 7-36. Serial Port Configuration Dialog Box

The IconMaster currently supports several serial port direct connections; however, you can expand the number of available serial ports with the ICONM-BO-V video breakout module[1] or an external interface device such as the JLCooper eBox. The Serial Port Configuration dialog box allows you to reassign the serial ports' functions. If the Serial port baud rate, bits, parity or stop bits are changed, the IconMaster will require a restart.

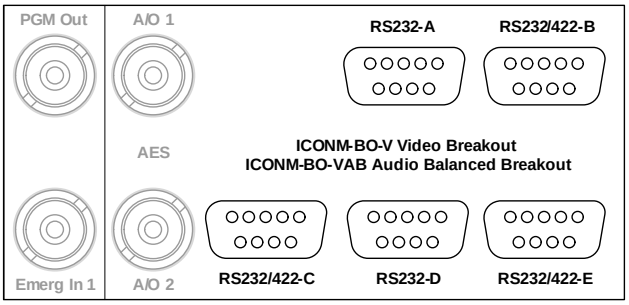


Figure 7-37. ICONM-BO-V Serial Ports

Note

Because of real-time response considerations, certain functions will always be assigned to ICONM-BO-V serial ports C and D. You cannot change the functions for these ports.

To change the serial port function of serial port A, B, or E on the ICONM-BO-V breakout module, highlight the name of the breakout module's serial port you want to configure, and then select a function fom the Option drop-down list box.

To change the serial port function on a port on the external interface device, highlight the name of the external interface port, and then select a option from the drop-down list box.

Note

To ensure proper functionality, you should verify the IconMaster hardware configuration for RS-422 or RS-232 for use of internal serial ports.

RS-232 pinouts are different between Port A and Ports B and E. Refer to the *IconMaster Installation and Configuration Manual* for wiring details.

[1] See the *IconMaster Hardware Installation and Configuration Manual* for more information about this breakout module.

CENTRIO Configuration Settings

To use CENTRIO with IconMaster, a valid license is required. See “License Management Settings” on page 190 for more information.

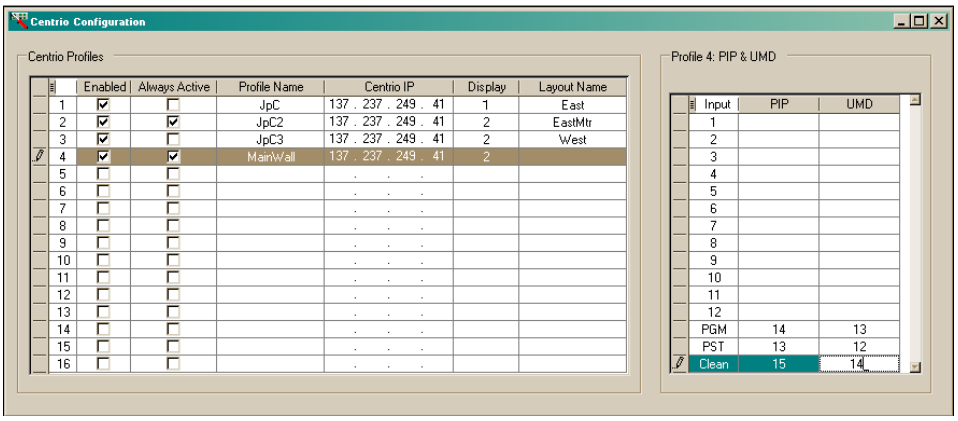


Figure 7-38. CENTRIO Configuration Settings Dialog Box

For each CENTRIO display the IconMaster will be controlling, create a Centrio Profile which defines the Centrio system, display output, and (optionally) the layout to display. Within the layout, you can define the PIP and UMD numbers that correspond to the IconMaster inputs (sources) and also the IconMaster outputs.

Table 7-8. Centrio Profiles Table

Item	Description
Enabled	Activates playout from IconMaster to this CENTRIO device
Always Active	If selected, this profile will become the activeprofile, if no other profile is currently controlling the selectedCENTRIO display endpoint (CENTRIO IP addresss and display number)
Profile Name	Title of the profile that will appear in CCS Navigator and CENTRIO Layout Designer when configuring CENTRIO
Centrio IP	The IP address of the Ethernet connector on the CENTRIO device
Display	The CENTRIO display number (ID) to control (value between 1 and 4) corresponding to the physical CENTRIO Display output DVI 1/2 or HD_SDI 1–4)
Layout Name	The name of the layout to be loaded If the layout name is blank, the CENTRIO will not be commanded to change layouts, thus leaving the existing layout on-screen. PiPs and UMDs will still be refreshed.

When you click on a row in the Centrio Profiles table, the Profiles table at the right of the dialog box updates with the contents of that profile. To complete a Profile, enter a PIP number for each input that is to appear in the layout, and enter the UMD address for that input.

Clock and Timer

For the clock and timer to be available, a button needs to be defined for each. See “Button Configuration Settings” on page 198.

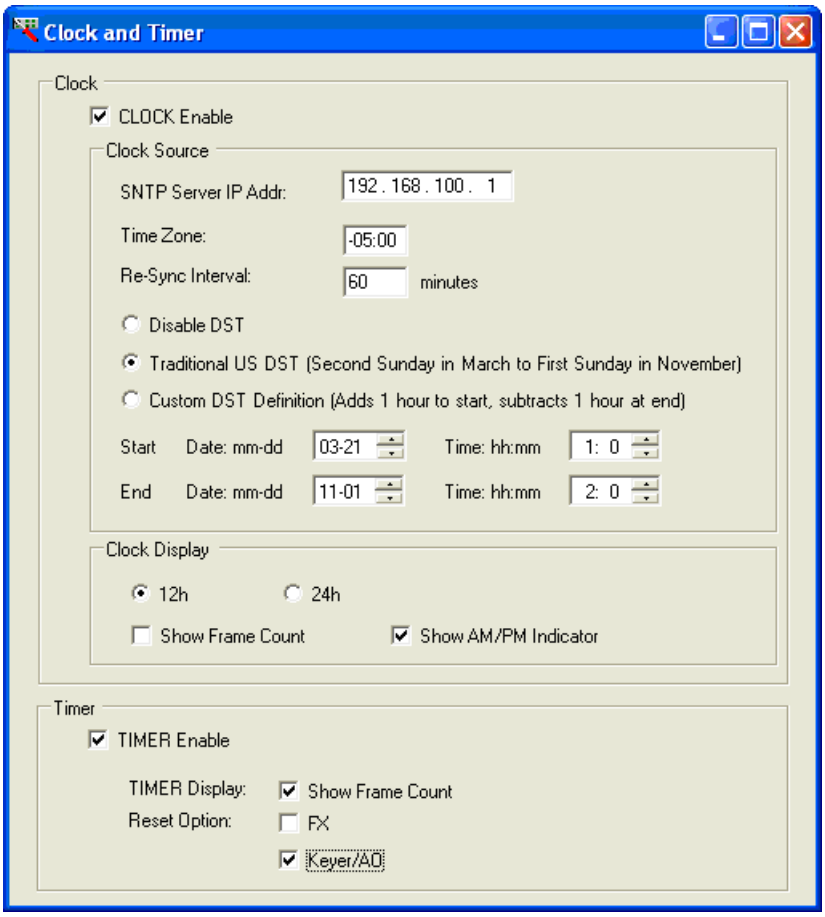


Figure 7-39. Clock and Timer Settings Dialog Box

The Clock and Timer dialog box includes settings for IconMaster's real-time clock and segment timer functions, each of which is detailed in Table 7-9.

Table 7-9. Clock and Timer Settings Options

Item	Description
CLOCK Enable	Enables IconMaster to synchronize its internal real-time clock with an external clock source. IconMaster uses the SNTP protocol across Ethernet to query an NTP time server.
CLOCK Source	Enter the IP address of an NTP time server, as well as a time zone offset. NTP time server provides UTC time, and requires the client (IconMaster) to provide a local time offset. By default, IconMaster will re-sync its clock every 60 minutes. This can be changed by editing the Re-Sync Interval field. If using IconMaster's RCP as the clock source, the RCP must be connected to an external LTC timecode time-of-day source. Enter the RCP's IP address as the SNTP Server IP Address. In this status, the local time offset (Time Zone) setting will be ignored by IconMaster. NOTE: • IconMaster does not maintain its real-time clock when power cycled. The NTP server (or RCP) must always be available when IconMaster powers up and during operations. • Press the CLOCK button on IconMaster's RCP to Re-Sync IconMaster's clock with the NTP server. • The "Start" time of DST should be local time and the "End" time of DST should be local time with DST shift.
Daylight Savings Time	IconMaster can automatically adjust for daylight savings time, if configured. If configuring a custom DST adjustment window, IconMaster will add one hour between the start and end times defined. NOTE: if configuring a custom DST window, the dates may need to be changed annually. If using IconMaster's RCP as the clock source, settings will be ignored by IconMaster, so just select **Disable DST**.
CLOCK Display	IconMaster can display the clock in either 12h or 24h formats. When configured for 12h format, IconMaster can display AM/PM indicators. The Frame Count can also be optionally displayed.
TIMER Enable	Enables IconMaster's segment timer functionality. When enabled, IconMaster will reset the segment timer to zero on each transition of the BKGD source.
Reset Timer	There are two options: **FX** and **Keyer/AO**. Check one or both of these options, and IconMaster will reset the segment timer on each FX transition and/or all keyer (video and Audio Over) transitions.

Clock and Timer are managed by the MKE card(s). They are not local to an RCP but they can change depending on what MKE the RCP is connected to. If the LTC output of a RCP is set to track the timer, it will NOT reset at a segment end if the panel is not connected.

The clock display of an RCP connected to a MKE that has never synced up with an NTP server will be --:--:--.--.

The text on the clock will be inversed if an RCP connected to a MKE has failed to resync with NTP server. In this situation, the MKE is free running (relying on its own clock).

The LTC output is only available on the HRCP RoHS compliant version of the HRCP (855T RCP). The LTC output on the RCP is frame drop in 29.9, no frame drop in 25.

Panels Group Settings

The Panel configuration menu group appears when you have selected “Control Panel Configuration” as your type of configuration.

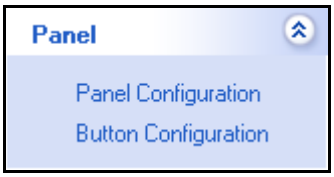


Figure 7-40. Panel Menu Group

This menu group controls the panel-specific configuration and panel network configuration functions, as shown in Figure 7-40. The functions controlled by this item group are described in .

Note

When uploading a new panel configuration, the control panel will disconnect from any IconMaster channel currently under control, and will automatically connect to Channel 1. Similarly, all Primary and Secondary channel groups will be disconnected, and must be re-established.

Panel Network Configuration Settings

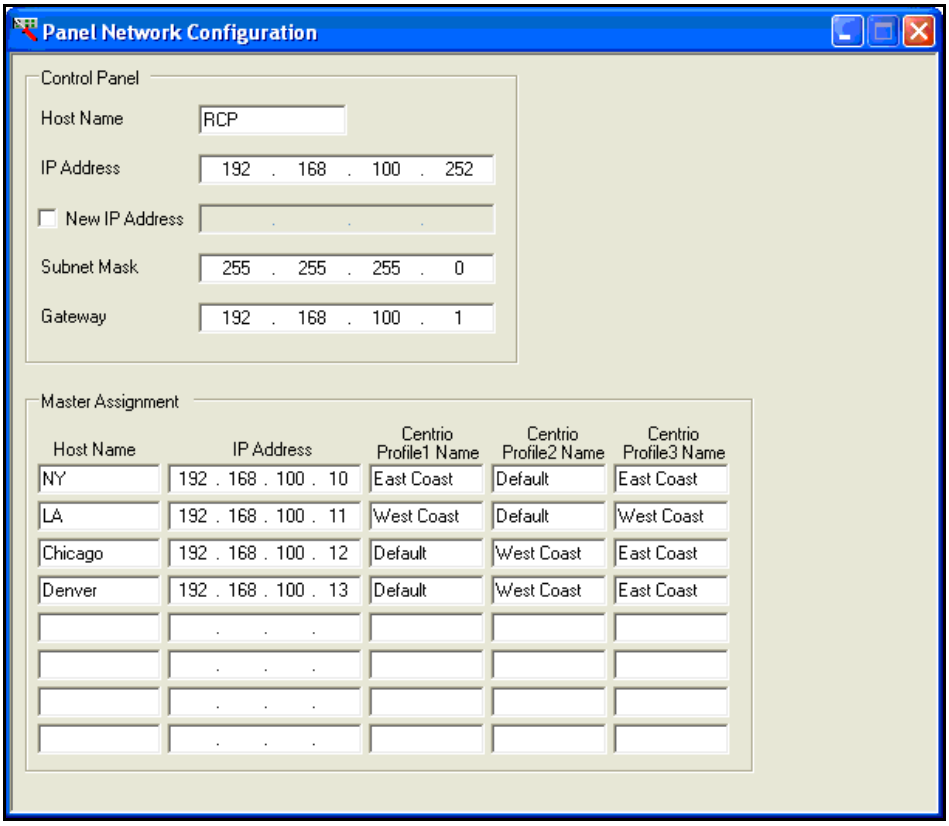


Figure 7-41. Panel Network Configuration Dialog Box

The **Panel Network Configuration** dialog box contains the network address settings that are necessary for the IconMaster control panels to communicate with the IconMaster MKE-3901 modules.

To change or set the name of the IconMaster control panel (up to 8 characters in length), click in the **Control Panel Host Name** field, and then type the new name. The factory default for the IconMaster control panel is **192.168.100.251**, and will be shown in the **Control Panel IP Address** field.

To change the IP address of the IconMaster control panel, select the **New IP Address** check box, and then enter the new IconMaster Control Panel IP Address.

- To change the Subnet Mask, enter the new IP address in the **Subnet** field.
- To change the Gateway IP address, enter the new IP address in the **Gateway** field.

The **Master Assignment** section of the dialog box allows you to enter the names and IP addresses of up to 8 MKE-3901 modules that the IconMaster control panel can communicate with. To change or set the name of an IconMaster MKE-3901 module, click in the **Host Name** field, and then type the new name, up to a maximum of 8 characters.

Similarly, to change or set the address of the IconMaster MKE-3901 module, click in the **IP Address** field, and then type in the new IP address.

If you have configured the IconMasters to interface with Harris Centrio multi-viewers, you can assign up to 3 Centrio Profiles to be automatically recalled and controlled when the RCP connects to the IconMaster. These Profiles are setup and named for each IconMaster individually. See page 193 to set this up.

When the RCP connects to the given IconMaster, it will recall the Centrio Profile defined in the "Centrio Profile 1 Name" field. Optionally, the operator may choose to recall Profiles 2 and 3 at connect time, and also any time during operations. If a Profile Name field is blank, no Centrio Profile operations will be initiated by connecting an RCP to the IconMaster. If no CENRIO profiles are configured on the RCP, but “Always Active” CENTRIO profiles are enabled on the IconMaster MKE-3901 module, the MKE-3901 will continue to maintain an active connection to the “Always Active” CENTRIOs, providing PiP,UMD, and layout updates as necessary.

Button Configuration Settings

Figure 7-42. Button Configuration Dialog Box

Using the **Button Configuration** dialog box, you can assign specific functions to the configurable clusters and to the transition cluster on the IconMaster main control panel. The available functions for each group of buttons are shown in Table 7-10.

WARNING

Always ensure that channel buttons are allocated left to right, with Channel 1 on the left most button of Cluster 1.

Table 7-10. Button Clusters, Functions, and Selections

Button Group	Function	Selections
Cluster 1 and Cluster 2	Frame Select	CH 1, CH 2, CH 3, CH 4, CH 5, CH 6, CH 7
	GPO Output control	GPO1, GPO2, GPO3, GPO4, GPO5, GPO6, GPO7, GPO8, GPO9, GPO10, GPO11, GPO12, GPO13
	Quick Selects	QS 1, QS 2, QS 3, QS 4, QS 5, QS 6, QS 7, QS 8
	Fast Reset (cluster 2)	SET, CLEAR, RECALL (appear in Parameter Adjustment Control cluster)
	Clocks & Timers	TIMER, CLOCK
	Fade to Silence	SIL
	Fade to Black	FTB
Transition Cluster	Transition Rates	SLOW, MED, FAST, CUT
	Breakaway	AUDIO, VIDEO
	Automation Hold	HOLD
	Effects	FX
	Fade Types	TAKEFADE, FADETAKE, FADEFADE, CROSSFADE
	Machine Control	CUE, FF, MARK, PLAY, REW, STOP
	None	None

Note

Changing any of the Transition Cluster functions will require the replacement of the text film on the corresponding IconMaster control panel button. See the *IconMaster Installation and Operation Manual* for more information.

To assign a function to a button, click the graphical button in the dialog box. A pop up window will display a graphical image of the current function assigned to the button, as well as a drop-down menu. The drop-down menu will list the available functions that can be assigned to the selected button. Select the new function from the drop down menu then click **OK** to accept the change, or **Cancel** to exit.

The newly assigned function name will appear on the graphical button. Each function can only be assigned to 1 button at a time. If the drop-down menu does not list the function you want to assign, either the function is not available for that button, or the function is already assigned to another button.

Note

Frame Select buttons must be assigned starting with the far left button on Cluster 1.

Chapter 8

Control Panel Functions Quick Reference Chart

Overview

This section provides a quick reference chart for the main control panel functions. It shows the control panel clusters (as illustrated in Figure 8-1 on page 202), the functions that fall within each cluster, and the IconMaster configuration utility dialog box that allows you to configure that particular function.

Note

The operation of the IconMaster system involves the main control panel and the optional audio control panel. You will need to configure your IconMaster system before you are able to operate the control panels. The configuration of the IconMaster system is performed using IconMaster software on a PC.

Main Control Panel

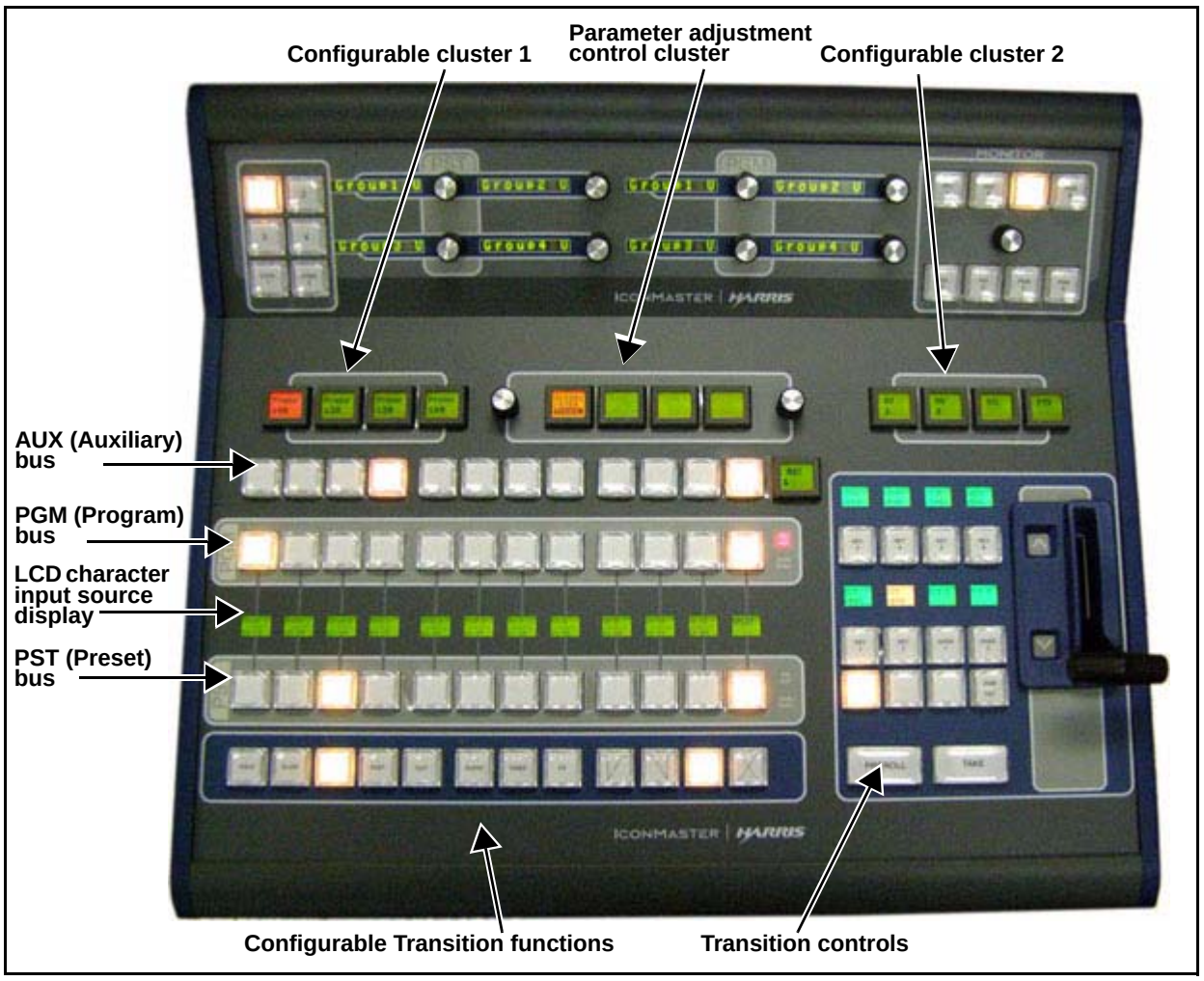


Figure 8-1. Primary Busses on the Main Control Panel

Table 8-1. Busses, Functions, and ICU Relationships

Control Panel Item	Functions	ICU Setup Information
Configurable cluster 1 and 2 (see page 11 for more details)	Fade to Black (FTB)	Button Configuration (page 198)
	Fade to Silence (SIL)	
	CLOCK, TIMER	
	Quick Select (QS1•••QS8)	
	GPO output control (GPO1•••GPO13)	
	Frame select (CH1•••CH7)	
	Fast Reset (cluster 2)	System Configuration (page 184)

Table 8-1. Busses, Functions, and ICU Relationships *(Continued)*

Control Panel Item	Functions	ICU Setup Information
Parameter adjustment control cluster (see page 12 for more details)	Source Select (SRCSEL)	Primary Inputs (page 145)
	Keyer control (KEYER)	Keyer (page 171)
	Transition control (TRANS)	Transition (page 157)
	Audio control (AUDIO)	Audio Configuration (page 148)
	Effects control (FX)	Effects (page 159)
	Quick Selects (Q-SEL)	Quick Selects (page 164)
Aux bus (see page 21 for more details)	Preconfigured auxiliary bus preview (AUX)	Aux Bus (page 153)
Program bus (see page 22 for more details)	PGM	Primary Inputs (page 145) System Configuration (page 184)
PST (Preset) bus (see page 22 for more details)	PST	Primary Inputs (page 145) System Configuration (page 184)
Configurable transition functions (see page 9 for more details)	Hold	Button Configuration (page 198)
	Transition Rate Slow Medium Fast Cut	Transition (page 157) Button Configuration (page 198)
	Breakaway Audio Video	Button Configuration (page 198)
	Transition Effects FX	Effects (page 159) Button Configuration (page 198)
	Transition Type Take-fade Fade-take Fade-fade Cross-fade	Transition (page 157) Button Configuration (page 198)
	Machine Control Type Cue FF Mark Play Rewind Stop	Machine control (page 172) Button Configuration (page 198)

Table 8-1. Busses, Functions, and ICU Relationships *(Continued)*

Control Panel Item	Functions	ICU Setup Information
Transition control cluster (see page 6 for more details)	External keys Key 1•••Key 2	Keyer (page 171)
	Internal keys Key 3•••Key 6	Keyer (page 171)
	Audio Over Audio-over 1•••Audio-over 2	Audio Configuration (page 148)
	Background (BKGD) (page 8)	—
	Transition “hot” button (page 9)	System Configuration (page 179)
	Preroll (page 9)	Machine Control (page 172)
	Take (page 9)	—
	Fader bar (page 9)	—

Chapter 9

Advanced Operations

Overview

This section describes advanced functions of the IconMaster control panel. It also concludes detailed information concerning the IconMaster configuration software:

- "Locking and Unlocking Panels" on page 206
- "Primary/Secondary Channel Assignments and Control" on page 206
- "Controlling CENTRIO Multiviewers" on page 211
- "Enabling a RouterMapper Database for Use with an IconMaster System" on page 213

This chapter presupposes that you are familiar with the layout of an IconMaster control panel. If you are not, please refer to Chapter 1: "Introduction" for more information.

Locking and Unlocking Panels

Use the Panel Lock capability whenever a panel needs to be physically locked, so as to prevent accidental button presses. Status indicators will continue to provide you with on-air selection and tally indications, while maintaining a protected panel state. You can lock the control panel through the Parameter Adjustment Control cluster.

Locking Panels

To lock a control panel, simultaneously press and hold the left and right buttons on the Parameter Adjustment Control Cluster. After about five seconds, all of the LCD buttons in the cluster will turn orange and display the word “Lock.” (The left and right LCD buttons will also display asterisks to remind you which buttons to push to unlock the panel [see Figure 9-1]).

Figure 9-1. Panel Lock Display

After a panel is locked, no physical changes can be made; that is, you can press any button on the control panel but no actions will occur. The panel will still display updates and changes from other inputs, however.

Unlocking Panels

To unlock a panel, simultaneously press and hold the left and right buttons on the Parameter Adjustment Control Cluster. The panel will unlock immediately. IconMaster will always to “remember” the last state of the Parametric Control Cluster. If any external control inputs have occurred after a panel is locked, the parametric controls will return to that state.

Primary/Secondary Channel Assignments and Control

You can use the channel assignments function to select up to eight IconMaster channels (one primary, with up to seven secondaries) to follow each other from a single operator panel.

Note

When uploading a new panel configuration, all Primary and Secondary channel groups will be disconnected, and must be re-established.

Keep in mind that you are controlling assignments, not information. Whatever action is assigned to one key may result in the display of different information.

Setting Up Primary/Secondary Assignments

Note

When selecting IconMaster channels for inclusion, they must all be the full version of IconMaster, or all be IconMaster Lite. Do not mix IconMaster and IconMaster Lite channels when configuring primary and secondary channels.

Care is required in preparing your system for primary and secondary assignments. To set up primary and secondary assignments, follow these steps:

1. If you have not already done so, set up the appropriate channels (with corresponding configurable cluster button functions) on the configurable control cluster(s) of your IconMaster control panel.

   (See page 197 for information on adding channels to the master assignment list. See page 198 for information on control panel button function assignments.)

2. Select the IconMaster that will serve as the Primary channel.
3. Make sure that the following ICU configuration settings (as shown in Table 9-1) for the secondary channels match the corresponding assignments for the Primary channel.

The list has been set up in tabular format so that you can easily check off assignments.

Table 9-1. Assignment Coordination Checklist

Primary Channel Assignment	Primary	Sec. Ch. 1	Sec. Ch. 2	Sec. Ch. 3	Sec. Ch. 4	Sec. Ch. 5	Sec. Ch. 6	Sec. Ch. 7
12- or 22-input mode								
Program sources								
Preset sources								
Preroll settings								
8 or 16 audio channels								
Audio profiles								
Audio Over profiles								
Aux bus assignments								
Number of logos								
Type of logos								
Positions of logos								
Number of effects								
Steps in effects								
Timing of effects								
Transition timings								
Quick selects								

The following list includes items commonly overlooked when setting up channel assignment coordination. Make sure that these items match, so as to minimize problems or confusion after the assignments are made. For example, if the primary and secondary channels have different numbers of logos in the MGI on each channel, the keyer on a secondary channel could become misconfigured. If primary and secondary channels have the same number of logos, but they are in a different order, results when switching may become unpredictable. If the primary and secondary systems use a router database, all systems must run from the same router database (or the same list of sources).

- Keyers on-air
- Keyers button(s) on/off
- Audio Overs on-air
- Audio Overs button on/off
- Audio/video breakaways
- SIL

- Quick selects (Note that quick selects can be used in primary/secondary mode, but are not automatically synchronized by the sync function. Therefore each system must have its quick select configured to be identical across all systems in primary/secondary mode, or undesired operations may result.)
- Gain on channels
- Background button
- Programs
- Presets
- Different logos selected for keyers

4. Press the LCD button for the channel you want to serve as the primary channel.

   The LCD display will turn red and the letters **PRI** (for primary) will appear.

Figure 9-2.

5. Press the LCD button that corresponds to the initial secondary channel.

   The LCD display will turn orange to indicate that it has been selected.

6. Select the next secondary channel, until you have selected all of the secondary channels you want.
7. When the selection process is completed, press the PRI display again.

   The master assignment channel will be displayed red and the secondary channels will be displayed as orange.

Synchronizing Selections

IconMaster has the ability to automatically synchronize all selected secondary channels to the primary channel. You can synchronize the assignments for the following items:

- Aux bus keys
- Program bus keys and Preset bus keys
- Internal and external key tallys
- Key lamps
- SIL (silent)

- FTB (fade to black)
- Transition types and speeds
- Breakaways
- Background transitions
- Internal key data
- Effects

Keep in mind that you are controlling assignments, not information. Whatever action is assigned to one key may result in the display of different information. In addition, a keyer's numeric values, if assigned, will not sync.

1. Press the LCD button for the channel you want to serve as the sync selection source.

   The LCD display will turn red and the letters **PRI** will appear. The last button on the right side of the parameter adjustment control cluster will turn red and the letters **SYNC NOW** will appear.

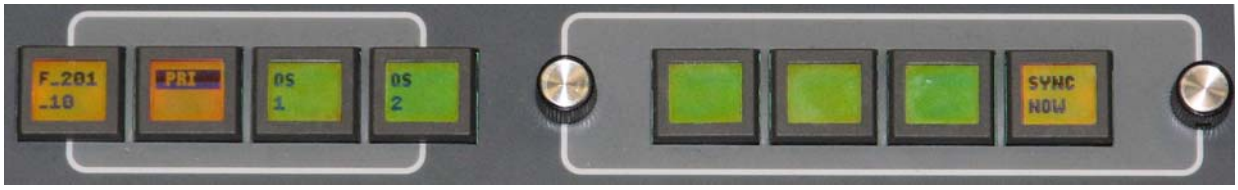


Figure 9-3. Sync Now Button (Far Right)

2. Press the LCD buttons that correspond to the channels you want to serve as the sync selection destinations.
3. Press all of the keys that correspond to the assignments that you want to sync.
4. Press the **SYNC NOW** display.

Removing Primary/Secondary Channel and Sync Assignments

1. Press the LCD button for the primary channel.

   The LCD display will turn red and the letters PRI will appear.

2. Press the LCD button that corresponds to the secondary channel you want to unassign.

   The LCD display will turn green to indicate that it has been deselected.

3. When the channels have been unassigned, press the **PRI** display again.

   The LCD display will turn yellow to indicate that has been deselected, and any sync assignments will be cancelled.

Controlling CENTRIO Multiviewers

By coupling an IconMaster to a CENTRIO multiviewer, you can control the CENTRIO directly from the IconMaster. IconMaster will drive Picture in Picture (PiP) source changes when different router inputs are assigned to IconMaster inputs. In multi-channel environments, IconMaster will allow changes in both PiP content and screen layout changes when switching from channel to channel.

You can also configure IconMaster to provide UMD/Tally information to a CENTRIO multiviewer. This is configured using IconMaster Configuration Utility. For more information, see “UMD Configuration Settings” on page 147, “Network Settings” on page 189; and “Serial Port Configuration Settings” on page 191.

To configure CENTRIO and IconMaster for monitoring of IconMaster systems, follow these steps:

1. In Layout Designer, create layouts and upload them to CENTRIO.
    - Each PIP in the Centrio Layout Designer needs to be assigned to a source button in the IconMaster configuration utility.
    - Additional PiPs need to be assigned to the Preset Program and Clean PIPs.

    See your *CENTRIO Layout Designer Manual* for more information.

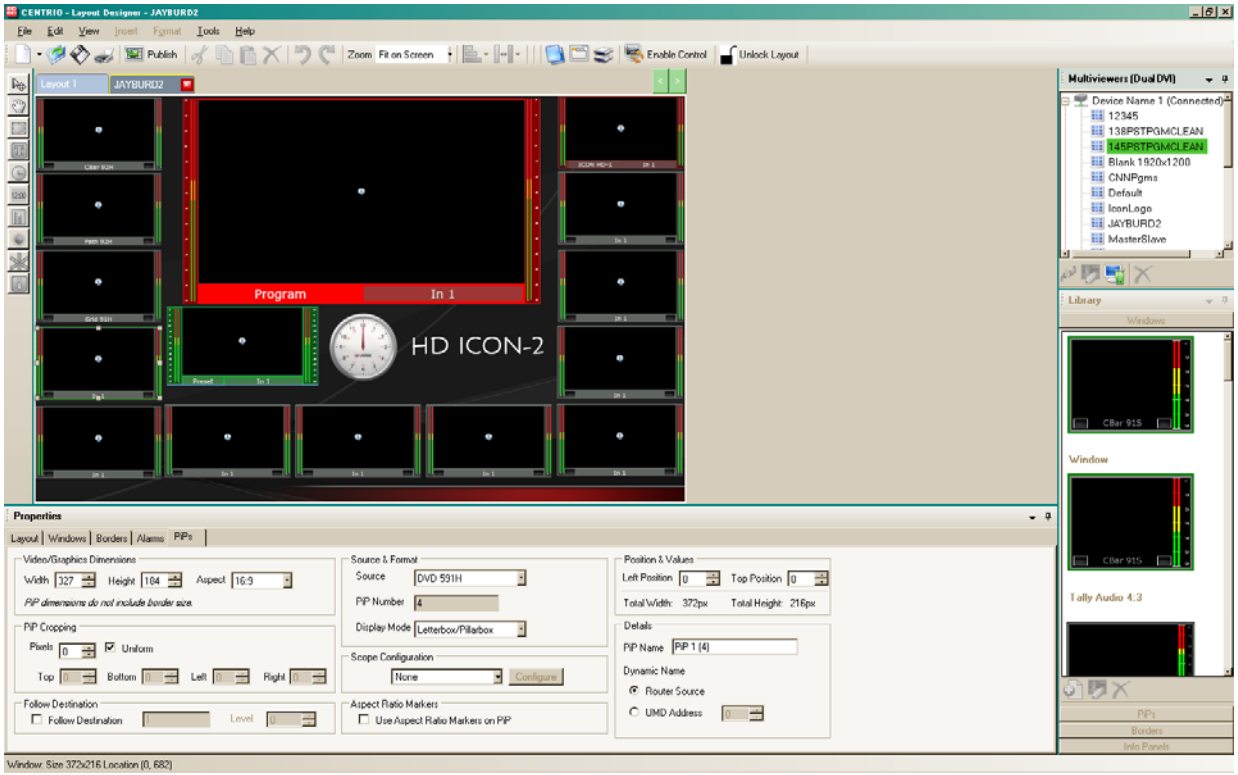


Figure 9-4. Typical IconMaster Layout in CENTRIO Layout Designer

2. In the IconMaster Configuration Utility, set up the IconMaster MKE-3901 with a CENTRIO license (if this has not been done already) and profiles.

   See “License Management Settings” on page 190 for more information.

3. In the IconMaster Configuration Utility, set up CENTRIO profiles on the **CENTRIO Configuration** page.

   - Align profiles between the IconMaster Configuration Utility and the CENTRIO Layout Designer (note the layout in Figure 9-4 is the same as the highlighted row in Figure 9-5).
   - Assign the UMD/Tally information for each PIP in the layout in the UMD column.

   See “CENTRIO Configuration Settings” on page 193 for more information.

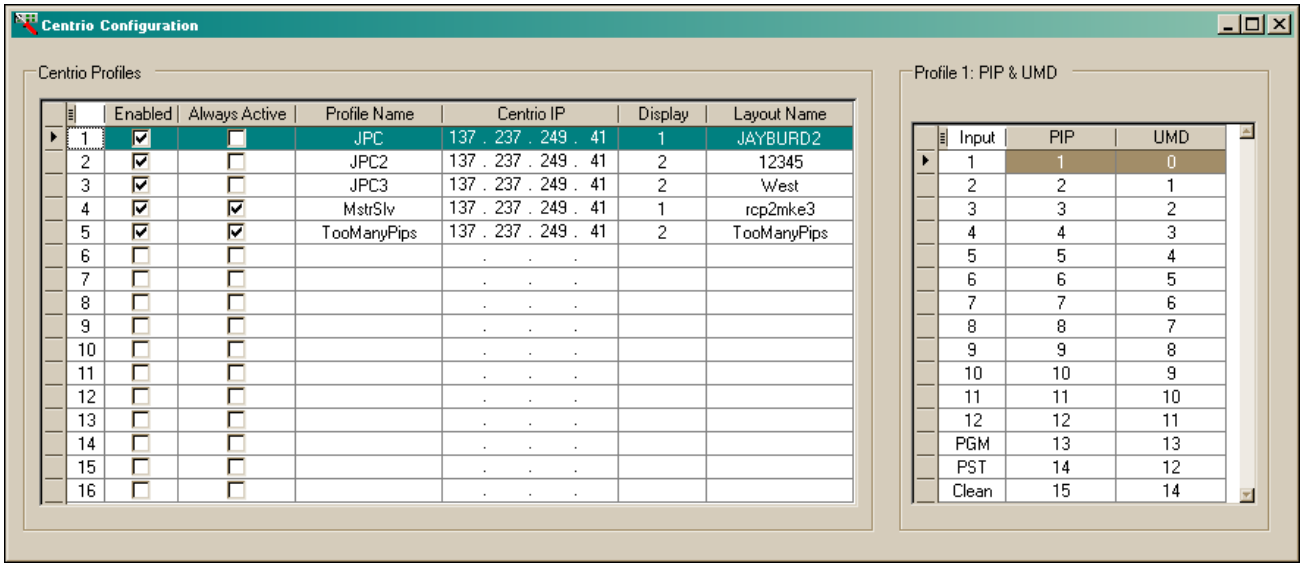


Figure 9-5. Selecting a CENTRIO Layout in IconMaster Configuration Utility

When a control panel selects an IconMaster channel, a CENTRIO display, as defined by the Centrio Profile and including layout, PIP and UMD/Tally information, will be sent to the CENTRIO and will be continually updated while the control panel is connected to the IconMaster.

CENTRIO operations with IconMaster require the use of Router Database mode. See “Enabling a RouterMapper Database for Use with an IconMaster System” on page 213 for more information.

Managing Multiple CENTRIO Profiles on the IconMaster HRCP

The IconMaster uses a profile to select the desired CENTRIO layoout, and UMD and PIP management. In IconMaster 3.1, the IconMaster HRCP can allow an IconMaster MKE-3901 to choose one of three profiles, allowing direct management of the CENTRIO and the required layout for channel management.

To access the CENTRIO Profile Management mode,

1. Press the currently active LCD button on the HRCP associated with the active MKE channel.

   The parameter adjustment control cluster presents the SYNC NOW button on the right-most button, and the three assigned CENTRIO profiles associated with the MKE in the HRCP configuration.

2. Press the desired profile.

   The CENTRIO and layout will be updated, and all previously configured PIP and UMD content will be managed.

Enabling a RouterMapper Database for Use with an IconMaster System

The IconMaster makes use of the Harris router configuration tools to create a router database for use in the IconMaster's setup and for select operations.

- You will use the Harris RouterMapper software to create a router database consisting of all sources and destinations which will be used with your IconMaster system. If you are connecting the IconMaster to a Harris router for which you already have a RouterMapper database, you can use this database as a starting point.
- Once a router database has been created, you will use the Harris Navigator software to send this database to the IconMaster. You can also edit the database at any time from within Navigator, and update the IconMaster with a simple button press.
- To configure the IconMaster's source inputs from the router, you will use the IconMaster Configuration Utility (ICU) to assign router sources as IconMaster inputs.
- Finally, if you have configured IconMaster inputs as Dynamic, you will use this database to assign new router sources to the IconMaster inputs.

This document provides you with the information you need to perform these procedures.

The discussion that follows is based on the assumption that you have a working knowledge of RouterMapper and Navigator software applications, and have used their other capabilities. If not, please refer to the appropriate software application manuals to familiarize yourself with their functions

Setting Up a RouterMapper Database (*.DA4)

Note

Databases for several popular Harris router configurations have been provided with your IconMaster system. These can be found in the IconTools software directory (typically **C:\Program Files** →

Harris → IconTools). You can use these databases, or create your own. See page 136 for a list of these “getting started” database files.

The steps described below direct you through the process to use for adding a router to a RouterMapper database. For illustration purposes, the discussion will focus on adding a Panacea 16×4 routing switcher through Polling. For specific information on adding or editing other Harris routers through RouterMapper, please see the *RouterMapper Configuration Utility Reference Guide*.

If you have set up a RouterMapper database for your IconMaster primary router already, you do not need to set it up again. Go directly to the section titled “Linking the RouterMapper Database to the IconMaster” on page 218.

1. Start the RouterMapper application (**Start → Programs → Leitch Routing Switchers → RouterMapper**).
2. Make sure that the communications settings (e.g., serial, TCP/IP) are configured correctly for your system.
3. Click on **Poll** to add the Panacea router to the database. (This may take a few minutes.) The results should resemble the information shown in Figure 9-6.

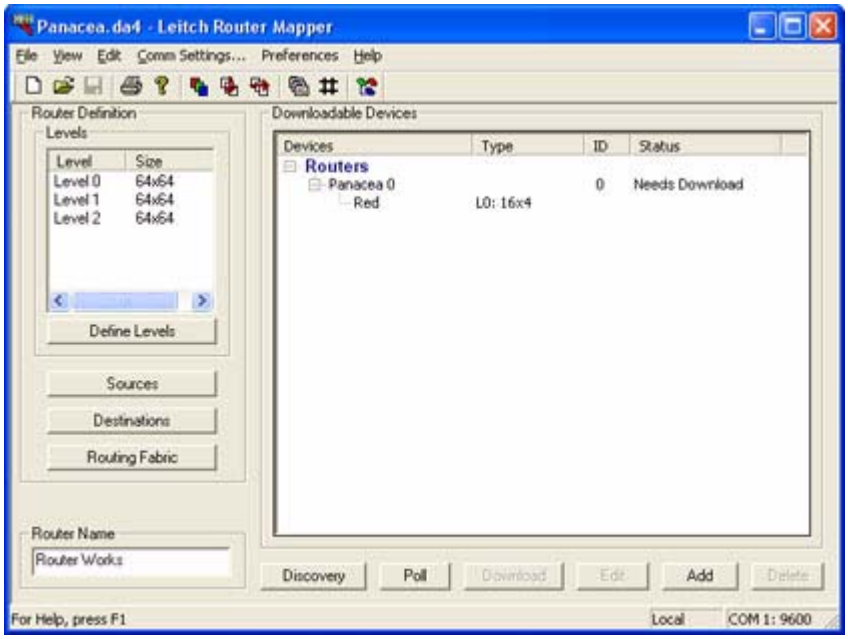


Figure 9-6. RouterMapper Main Menu Window Display

4. At the **RouterMapper** main menu window, highlight the **Panacea** router entry, and then click **Edit**.
5. Select the **Router Frame** tab. Panacea module information such as matrix size, type, and module options will be displayed (see Figure 9-7). These will vary, depending on your Panacea’s matrix type.

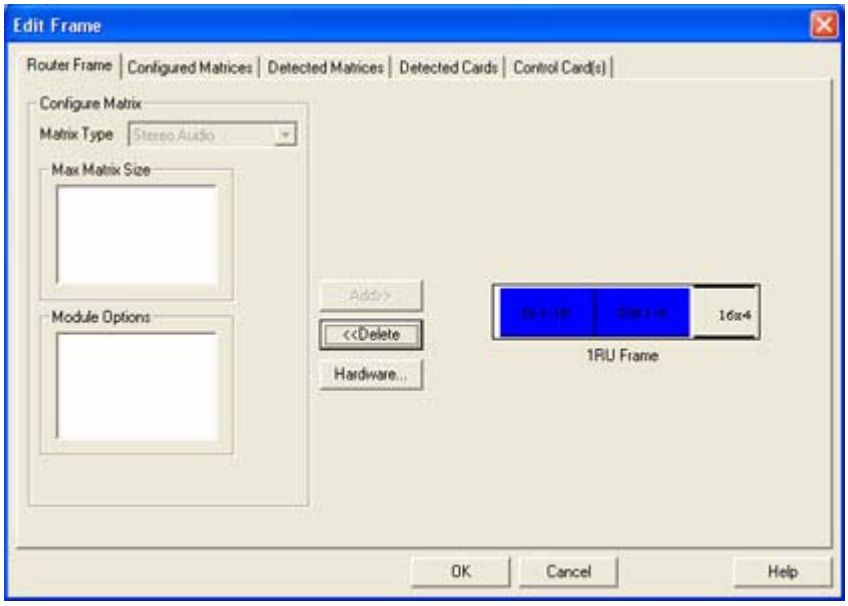


Figure 9-7. Router Frame Tab

6. Select the **Detected Cards** tab. Panacea module information such as card type, back panel type, and firmware version will be displayed.

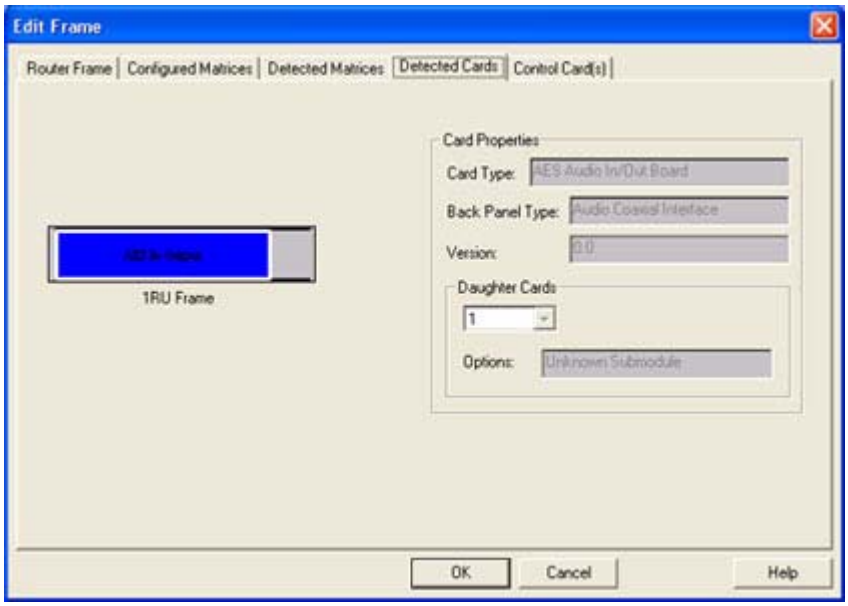


Figure 9-8. Detected Cards Tab

7. Select the **Detected Matrices** tab. Matrix information should resemble the information shown in Figure 9-9.

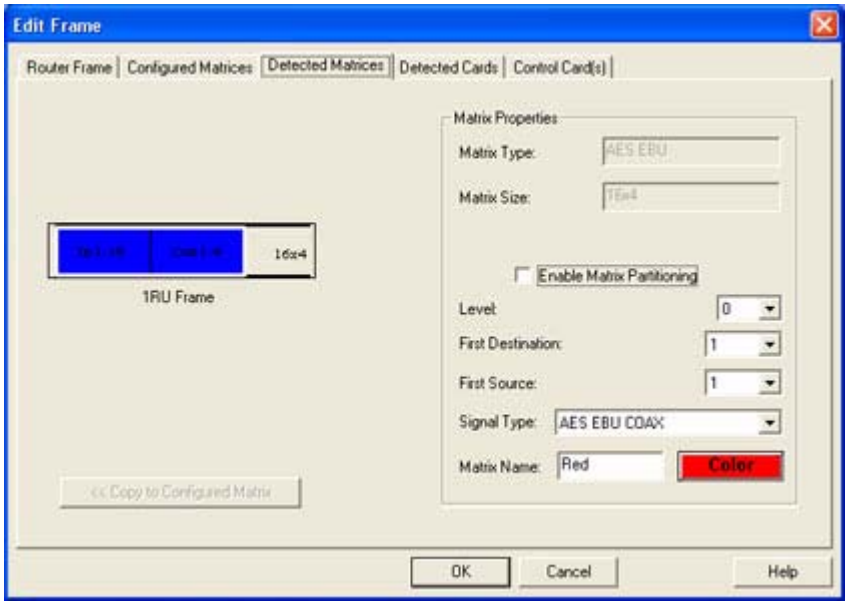


Figure 9-9. Detected Matrices Tab

8. Click **OK**. You will return to the RouterMapper main menu window.

   When the database is first created, each logical source will be assigned a generic name such as “Input 1,” “Input 2,” etc. Each logical source can be renamed to uniquely identify the source. A source name can contain any 8 characters. To rename a source:

   a. At the RouterMapper main menu window, click **Sources**. The **Edit Logical Database** window will appear. If necessary, select the **Logical Sources** tab.

   b. Highlight the text in the **Name** box.

Figure 9-10. Edit Logical Database

   c. Over-type it with the new name. Make sure that you follow the category/indexing format as described below.

      When a source name is entered in the database, RouterMapper uses the name to automatically create a category. RouterMapper finds the last space in the source name, and then uses all characters to the left of that space as the category (the space will be included in the category name). All characters to the right of the space will become the index. For

example, if a logical source is named “VTR 1,” RouterMapper will create a category named “VTR.” If the source name does NOT include a space, the entire name will be used to create the category name. For example, if “VTR1” is typed without a space, the category “VTR1” will be created. This may limit the number of sources that can be accessed from the panel. Use spaces appropriately when naming sources. If any character after the space is not a valid index character (valid characters are any combination of numbers, 0-9), the entire name will be used to create the category name. For example, if “VTR 10Z” is typed, a category named “VTR 10Z” will be created (not a category “VTR” and an index “10Z”).

9. If you made changes on any of the router tabs, the message “Needs Download” will appear next to the router name listed on the RouterMapper main menu window. Highlight the router and click **Download** to download the revised settings to the router.
10. Save the database. (The default database name is default.DA4. You can save the database under another name, but do not change the DA4 extension.) Remember the filename and path for this database, as you will need to enter this information later.
11. Close the RouterMapper application.

Linking the RouterMapper Database to the IconMaster

1. Start the Navigator application (**Start → Programs → Harris Navigator 4.3 → Navigator**).

   Navigator will take a few seconds to initialize itself and open the main menu window.

   If Navigator is in Control mode (indicated in the bottom right corner of the Navigator screen), switch it to Build mode by selecting **File** > **Operational Mode** > **Control** from the main menu.

2. In the **Navigation** pane on the left side of the Navigator window, right-click on the **Routers** selection, and then select **Create → Routing System**.

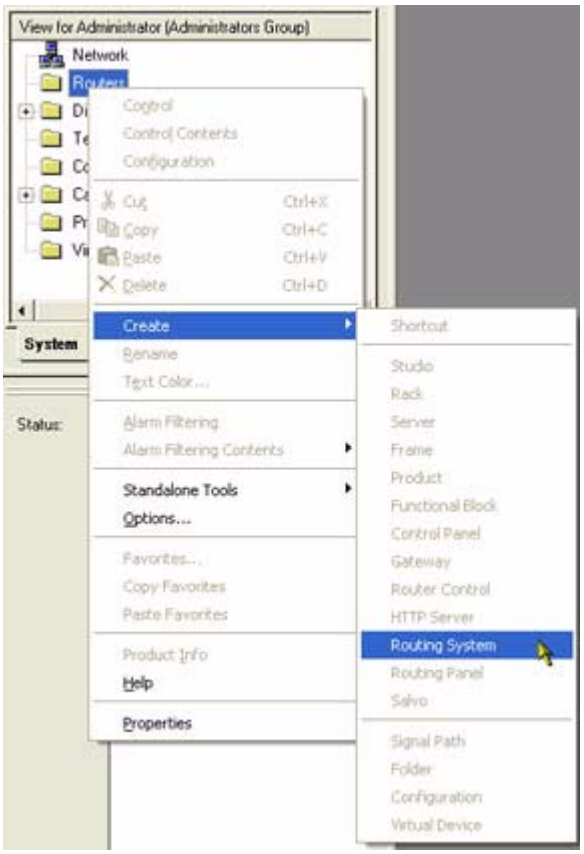


Figure 9-11. Create Routing System Sequence of Steps

The **Create Routing System** window will appear.

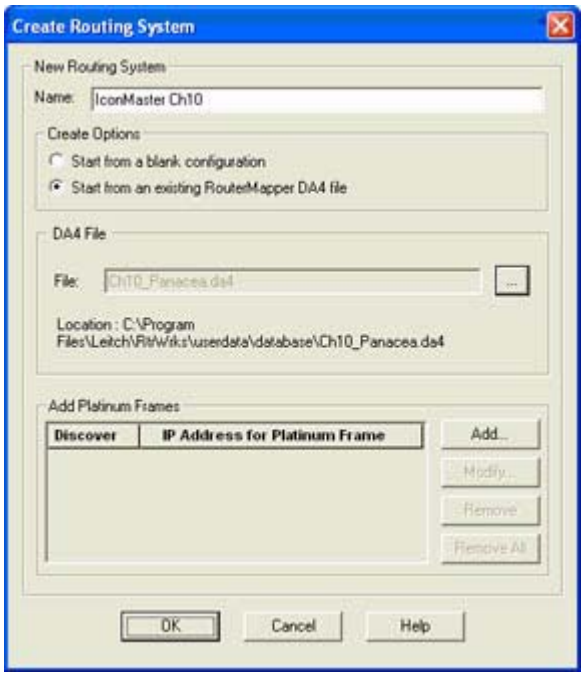


Figure 9-12. Create Routing System Window

3. Select the radio button next to **Start from an existing RouterMapper DA4 file**.
4. Select the appropriate DA4 database file from the list displayed (if necessary, use standard Windows navigation techniques to move to the subdirectory where the DA4 file is located), and then click **Open**.
5. In the **New Routing System** → **Name** text box, enter a name for the routing system you are creating, and then click **OK**.

   Navigator will run RouterMapper in the background for a few moments.

6. in the **Navigation** pane, expand the **Routers** selection.

   The name of the newly-created routing system will appear as a sub-entry. Additional sub-entries under the router system name include **Control Views**, **Salvos**, and **Routers**.

   - Under **Control Views**, you will find a view that tells the IconMaster where everything is. (To view the configuration, right-click on this selection, and then click **Configuration**. RouterMapper will open up the selection so that you can view your sources as set up within RouterMapper.
   - Under **Routers**, you will find the actual router content.

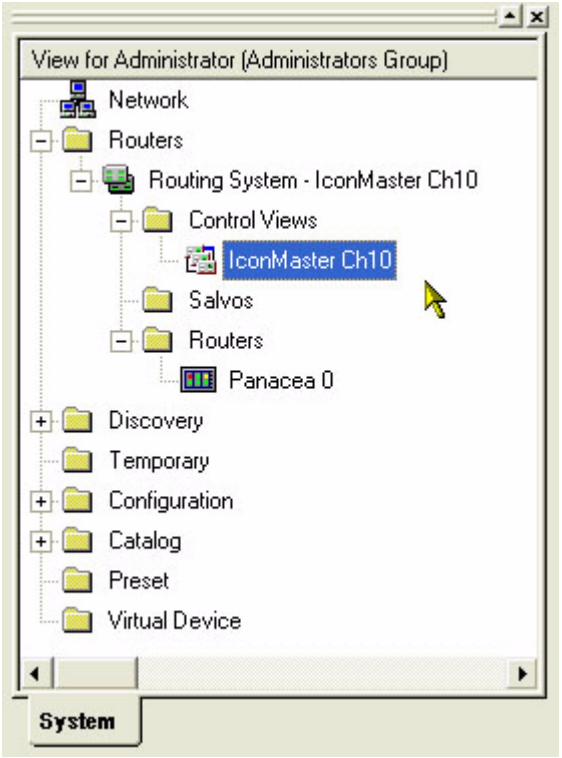


Figure 9-13. Control Views and Routers Sub-Entries

Defining the IconMaster's Router Configuration

Note

You must refresh the device after this procedure for changes to take effect.

1. In the **Navigation** pane, locate the **Catalog** selection. If necessary, expand the selection to view the sub-entries.
2. Drag the IconMaster sub-entry from under the **IconMaster (MKE)** entry to the **Configuration** selection, and then click **Yes** to confirm the operation.
3. If necessary, expand the **Configuration** selection to view the sub-entries.

   You will now see an entry for **IconMaster (MKE)**, with a **Router** sub-entry below it.
4. Drag the database entry under the Control View you created in step 6 on page 220 down to the **Configuration** > IconMaster (MKE) Router/Centrio Views selection, and then click **Yes** to confirm the change.

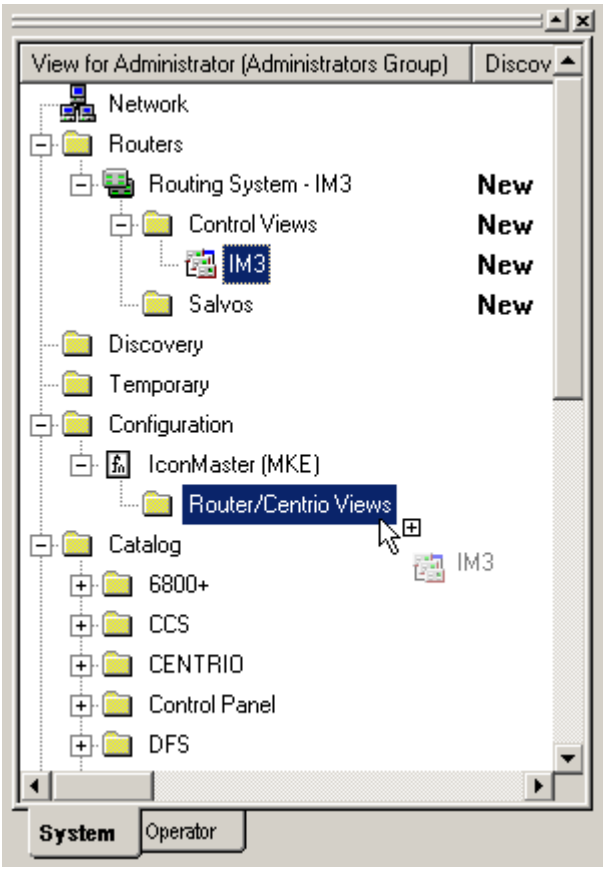


Figure 9-14. Drag-and-Drop Control View

5. If necessary, expand the **Routers** selection to view the sub-entries. You will now see an entry for the Control View under the **Router** sub-entry.

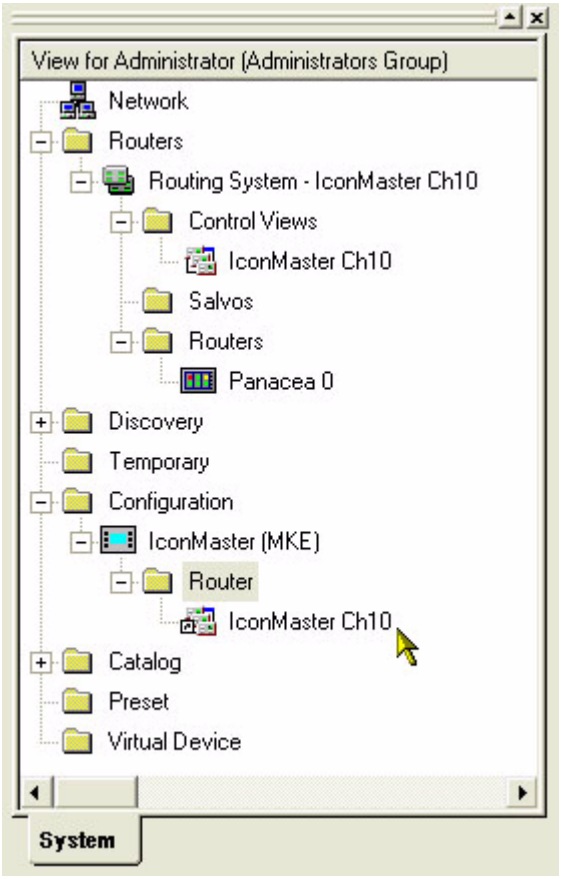


Figure 9-15. Control View Under **Router** Sub-Entry

6. Right-click on the **IconMaster (MKE)** sub-entry under the **Configuration** selection, and then select **Properties** from the pop-up menu.

   The **Navigation Properties** window will appear.

7. Select the **Device** tab. In the text box directly above the **Set Default** button, enter the IP address for the IconMaster's MKE-3901 module, and then close the window. **Do not change any other information in this tab!** If you do, you will lose your connection to the IconMaster and you will need to start the process all over again.

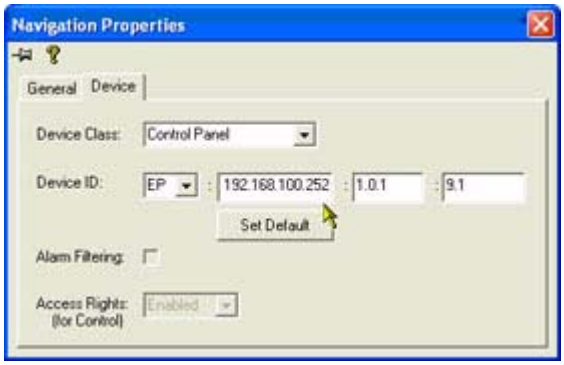


Figure 9-16. Navigation Properties Window

8. Double-click on the **IconMaster (MKE)** sub-entry under the **Configuration** selection. The **Configuration for IconMaster (MKE)** window will appear.

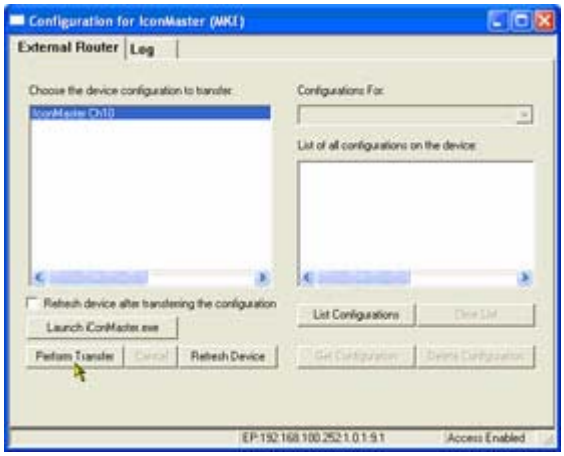


Figure 9-17. Configuration for IconMaster (MKE) Window

9. Highlight the device configuration you want to transfer, and then click **Perform Transfer** to send the router database to the IconMaster. A message will appear that asks you to confirm the transfer. Click **Yes**.
10. After the transfer is complete, click **Refresh Device**, and then click **List Configuration**. The XML files will be listed on the right side under **List of All Configurations on the Device**. Confirm that the config.xml and routerdb.xml files are listed.

Note

You must refresh the device after this procedure for changes to take effect.

At this point, you have built a router database using RouterMapper, and transferred the database to the IconMaster using Navigator. The next steps will allow you to assign the router sources as IconMaster's inputs.

Preparing the IconMaster Configuration

1. Start the IconMaster Configuration Utility (ICU) by selecting the button labeled **Launch IconMaster Config Utility** or from the **Start** menu (**Start → Programs → Harris → IconTools → IconMaster → IconMaster Configuration Utility**).
2. Click **OK**. The ICU application will open.
3. If you have already created an IconMaster configuration, select **File → Open**, and then select your configuration file. Otherwise, select **File → New**, and then select the type of configuration to create (in this case, select **IconMaster Frame Configuration**.)

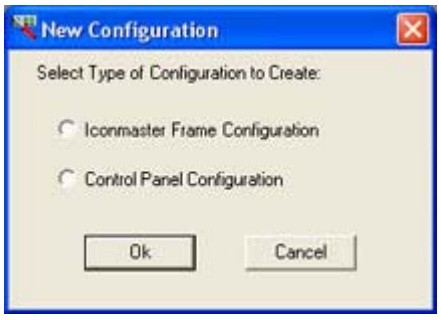


Figure 9-18. New Configuration Window

4. Click **OK**. The main ICU window will appear.
5. Under the **System Config** category on the left side of the ICU window, verify the following settings are set up correctly:
   a. Select **Genlock and Standard**. From the **Operation Standard** drop-down list box select the operating standard you want to use.

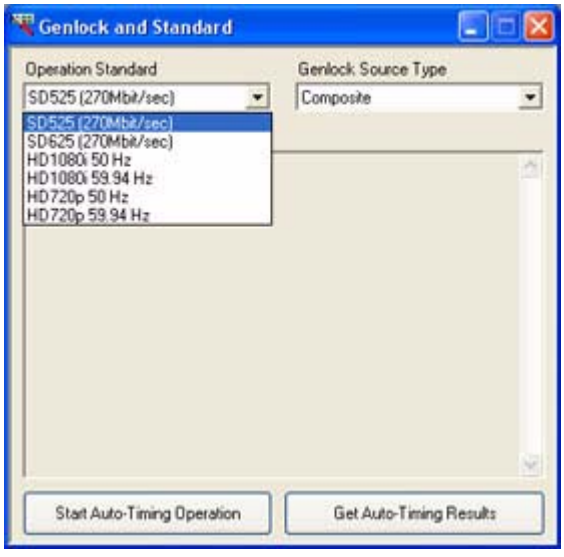


Figure 9-19. Selecting Operation Standard

b. Select **Network**. Here you will identify the IconMaster's MKE-3901 module's Ethernet settings.

- Enter a new name into the **IconMaster Channel Name** text box.
- Enter the IP address, subnet mask, and (optionally) the network gateway settings for the IconMaster's MKE-3901 module. When all entries are complete, close the **Network** window.

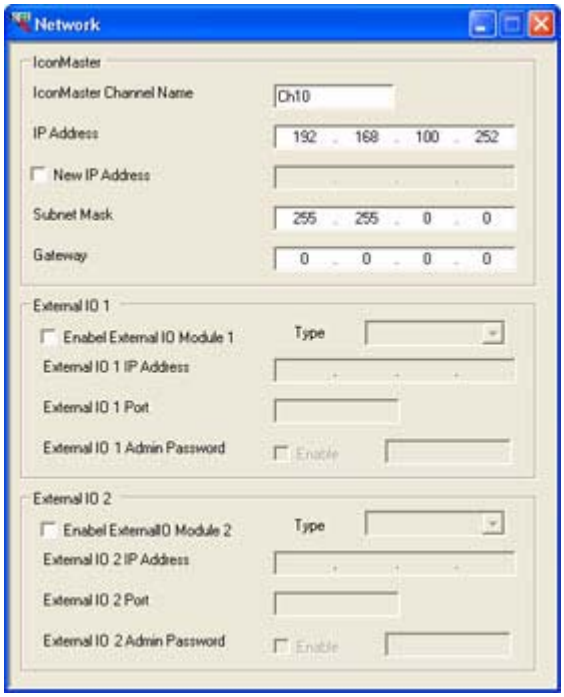


Figure 9-20. IconMaster MKE-3901 Network Settings

A few moments after entering the IconMaster IP address on the network page, the flashing OFFLINE will change to ONLINE, to indicate that the IconMaster Configuration Utility has successfully detected and connected with the IconMaster MKE-3901 module.

c. Select **Router Configuration**. The **Router Configuration** window will appear. Make the following selections:

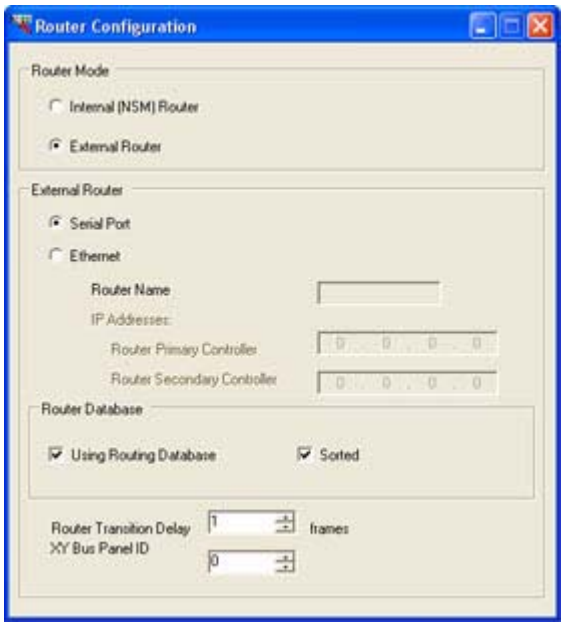


Figure 9-21. Selecting Router Mode and Router Database Characteristics

- Under **Router Mode**, click the **External Router** radio button.
- Under **Router Database**, click the **Using Router Database** and **Sorted** check boxes.

  The **Acquire Router Database** window will appear. Select the database source, and then click **OK**.

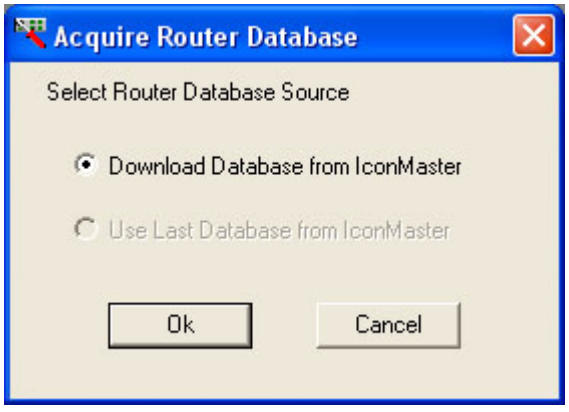


Figure 9-22. Acquire Router Database Window

Another window will appear asking you to confirm that you want to download the XML file. Click **Yes**.

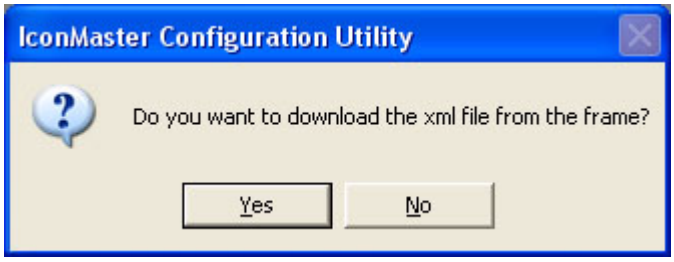


Figure 9-23. Download Confirmation Window

Once the download is completed, you will get the following message “Routing Database Successfully Downloaded.” Click **OK**.

Now you must save the database. In the window “You must save your configuration file before proceeding,” Click **OK**.

A **Save As** window will open, which will allow you to select the location and filename for your configuration file.

- If you are using a Platinum router, select “5” from the Router Transition Delay spin box for a 5-frame router transition delay. If not, the default setting of “1” will suffice.

6. At the bottom left of the ICU window, you will see displayed the frame name, the operating standard, and the IP address you just entered. You will also see the word Connecting.

Assigning Router Inputs

1. Under the **Input/Output** category on the left side of the ICU window, click **Primary Input**. The Primary Input window will appear.

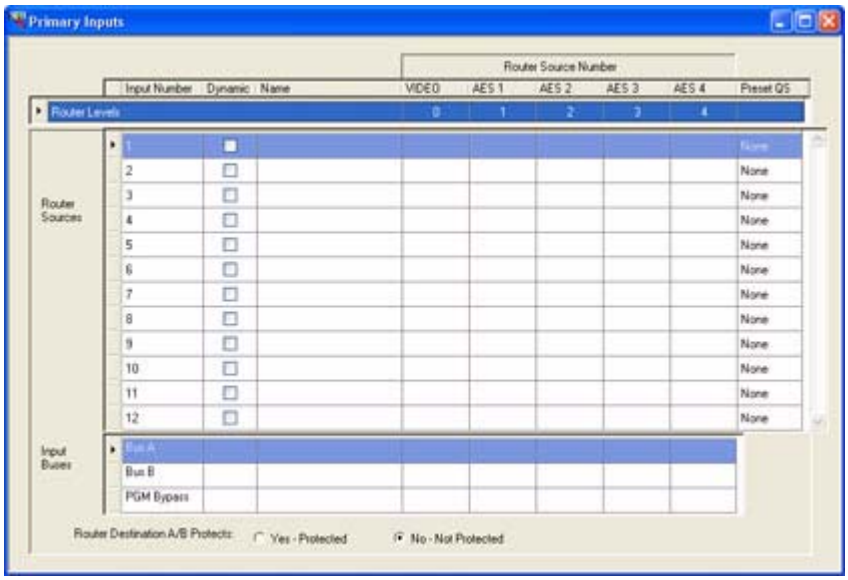


Figure 9-24. Primary Input Window

2. Under **Router Source Number**, the level numbers displayed should match the levels set in your database. In the unlikely event that they do not, you can change the level number in the list boxes to match the levels set for your router. Set any unused level to **Unused**. Note that the **Video** column must have a router level assigned.

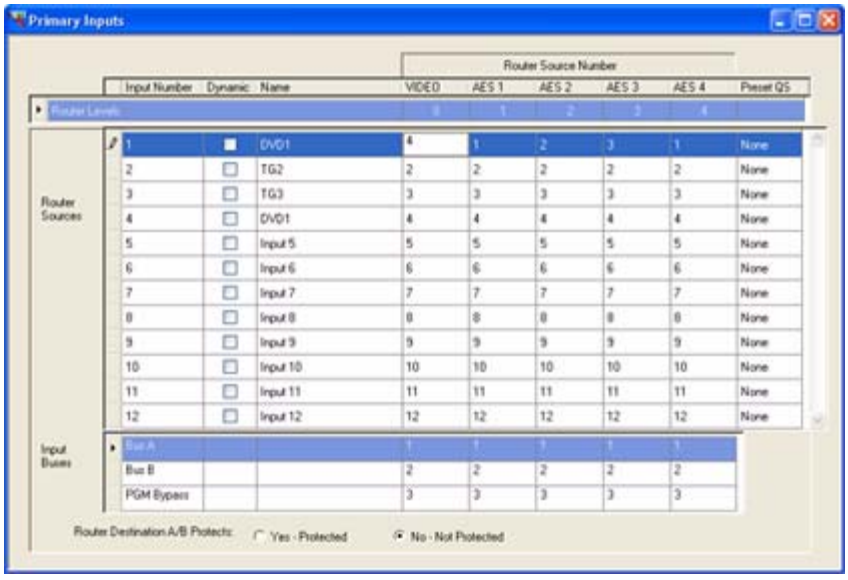


Figure 9-25. Changing Router Levels

3. Click the check box(es) next to the appropriate source(s) that will be dynamic
4. Select a router source(s), and then enter a name for the router source in the **Name** list box.

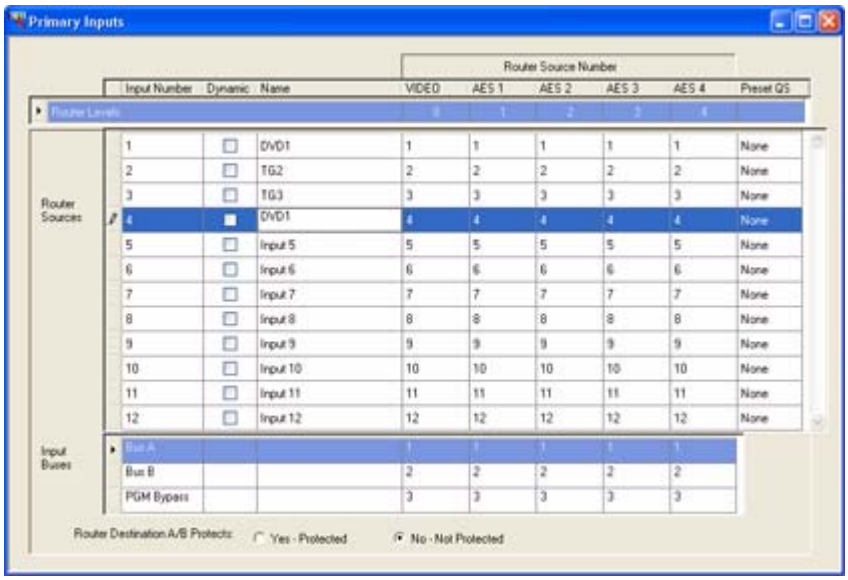


Figure 9-26. Changing Router Source Names

5. For the Input Buses: Bus A and B, enter a **Name** in the list box for the router destinations which are connected to the IconMaster's A and B inputs.

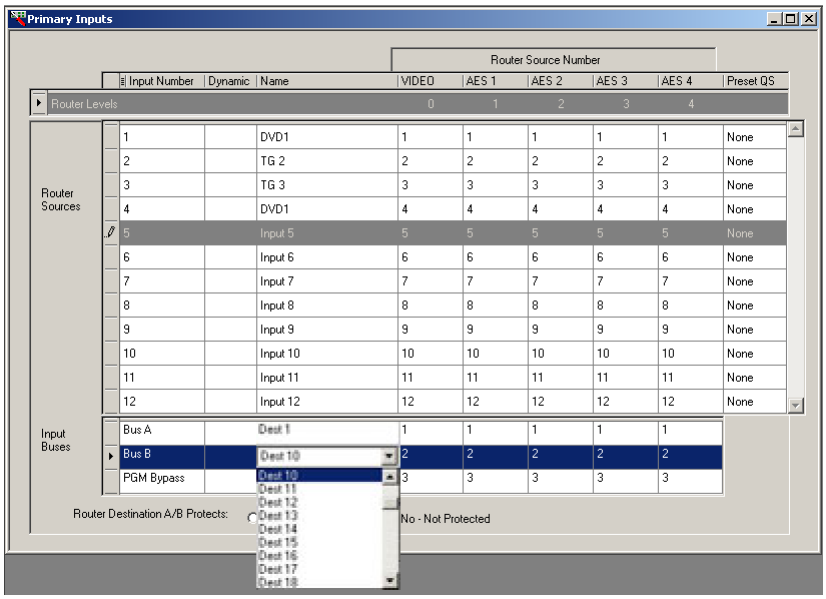


Figure 9-27. Selecting Bus A and Bus B Inputs

6. Under the **Input/Output** category on the left side of the ICU window, click **Aux Bus**. The Aux Bus window will appear.

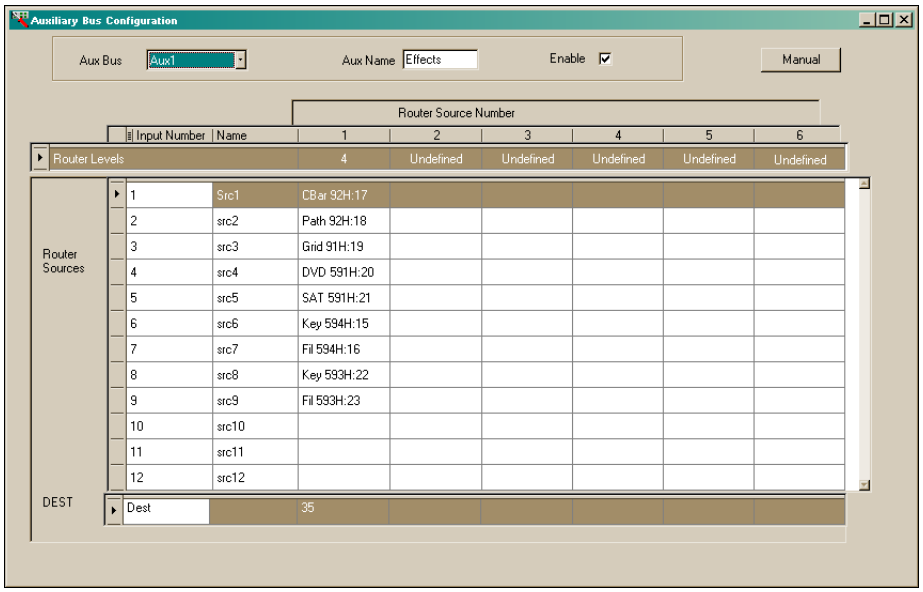


Figure 9-28. Setting up Router Database Aux Operations

Note

When ICU is configured for Router Database mode, the Aux bus presentation changes to allow selections from the router database for configuration of database sources.

If a database source is missing for a particular level/crosspoint, click on the desired cell within the Aux bus page, and then click **Manual**. You can then override or assign a desired crosspoint data value.

7. From the Aux Bus menu in the top left of the dialog box, choose each bus, and then check or uncheck **Enable**.

   Disabled Aux buses will not appear in the RCP, and will appear grayed out on the ISCP.

8. For enabled buses, type router sources, where they differ from those displayed on the screen.
9. Select **File** → **Save As**, and then enter a name for the configuration.
10. To send the configuration to the IconMaster, click the **Send Configuration to Frame** button.

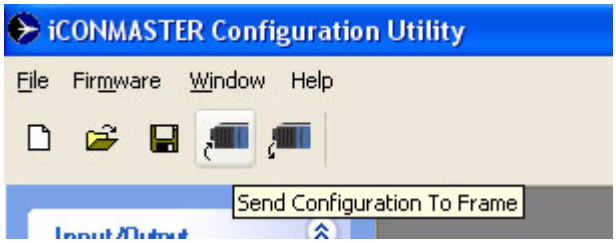


Figure 9-29. Sending Configurations to a Frame

At this point, you should have an operational IconMaster, which has inputs assigned from the router.

Changing or Editing the Router Database

If you need to add, delete or change an entry for the IconMaster's router, you will want to update the router database. This procedure describes the workflow to perform this change and update.

1. From within the Navigator application, select the IconMaster router database entry under the **Routers** → **Control Views** tree.

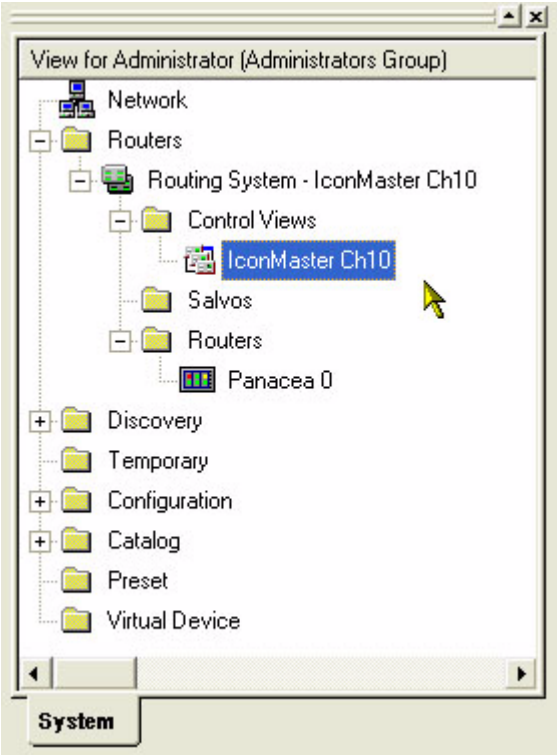


Figure 9-30. Router Database Entry Location

2. Double-click the IconMaster's router database entry to start the RouterMapper application. You can edit, add, delete, or change entries as needed. If you adjust the logical system size of your router configuration to be specific to IconMaster, all source names, destination names, and router sources will have to be re-entered into the new database.
3. To update the database on your IconMaster, double-click the **IconMaster (MKE)** sub-entry under the **Configuration** selection. The **Configuration for IconMaster (MKE)** window will appear.

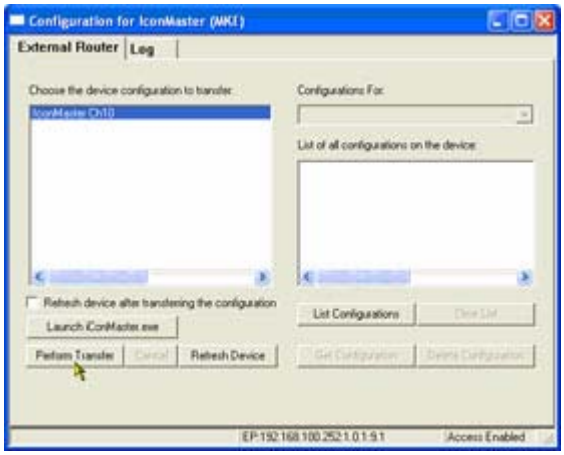


Figure 9-31. Configuration for IconMaster (MKE) Window

4. Highlight the device configuration you want to transfer, and then click **Perform Transfer** to send the router database to the IconMaster. A message will appear that asks you to confirm the transfer. Click **Yes**.
5. After the transfer is complete, click **Refresh Device**.
6. Any router database changes you made will become active on the IconMaster within a few seconds. If you wish to change the assignment of router sources to IconMaster inputs, use the IconMaster Configuration Utility to make these changes.

Appendix A

Introduction to IconLogo

Overview

This chapter covers the following topics:

- "Introduction" on page 234
- "Features" on page 235
- "Logo Creation and Transfer" on page 238
- "Connecting an IconMaster to an EAS Device" on page 239

See the *FR-3901 and FR-3903 Installation and Operation Manual* for information about NEO frames. The frame manual includes information about these items:

- General information about module unpacking, installation, removal, navigation, configuration, and setup
- Card-edge screen savers
- State recovery parameters
- Fan modules
- Resource modules
- Alarm interconnect modules
- Power supplies
- Genesis adapters
- Servicing instructions

Introduction

Note

Logo time lines and independent transition control are not supported in this release. Audio playback on logos is supported with MGI-3902 and MGI-3903 only.
Not all features of the IconLogo product apply to the IconMaster. Parameters that do not apply are noted accordingly.

The IconMaster incorporates an IconLogo graphics engine to offer a complete master control solution with embedded branding. The branding engine allows for static, animations, clocks, and crawls under the transition control of IconMaster. Logos can be previewed on the PST output before they are taken to air. Animations are set to automatically run on a take transition from the IconMaster. Logo selection from the IconMaster panel is through the Logo menu available on **Keys 3** through **6**. Selecting the **Logo** menu on **Keys 3** through **6** allows the user to scroll through a list of available logos. The display window for Logo selection displays the first five characters of the logo name. Pressing the right-most scroll knob selects the logo to the Keyer. A complete set of branding soft tools is supplied with IconMaster.

IconLogo Soft Panel

The soft panel allows for logo management, creation, and parametric changes. Logos can be viewed and selected to layers using the soft panel, but direct transitions are NOT allowed from the IconLogo panel. Transitions of logos are accomplished using **Key 3** through **6** selections on the IconMaster. Optionally, the IconLogo hardware panel can be purchased and used, offering the same functionality as the soft panel.

Note

If a key layer is on-air, any changes made to that layer are applied instantly.

Content Editor

The Content Editor supplies both static and dynamic data for crawls. See Appendix F: “Content Editor Software Application” for more information about this application.

LogoCreator

The LogoCreator application makes it possible for you to create static and animated logos offline. This is the recommended process for logo creation, as logos are pre-rendered and require less time to load. Logos can be loaded directly into both the near-line and on-line storage, ready for use with the IconMaster keys. See Appendix E: “LogoCreator Software Application” for more information about this application.

Features

IconLogo can have up to 999 logos available for instant access at all times after power-up. Each of these logos may be one of the following types:

- Static logo
- Animation
- Analog clock
- Digital clock
- Quick select
- Text crawl and titling (including EAS and Amber Alerts)

Logo Features

IconLogo loads all graphics and audio files in their native formats. **Any conversion required is performed either “on the fly” or off-line through the LogoCreator application.** The graphics formats that may be used directly are as follows:

- Leitch/Harris IconLogo format (*.mg2)
- Targa (*.tga)
- Tiff (*.tif, *.tiff)
- Gif (*.gif) (not supported by LogoCreator)
- PC Paintbrush format (*.pcx)
- Windows®[1] Bitmap (*.bmp)
- Silicon Graphics Image Format (*.sgi, *.rgb)
- Portable Network Graphics (*.png)
- Leitch LogoMotion (previous generation) logo format (*.mgi)
- Portable Bitmap (*.pbm) (not supported by LogoCreator)
- Portable GreyMap (*.pgm) (not supported by LogoCreator)
- Portable PixelMap (*.ppm) (not supported by LogoCreator)
- JPEG (*.jpg)
- Quantel Video Paintbox format (*.vpb) (not supported by LogoCreator)

[1] “Windows” and “Microsoft” are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Supported audio files (when using MGI-3902/MGI-3903) must be 48 Khz, 16-bit WAV (*.wav).

Animation Features

Animations load their graphics from mg2, mgi or individual numbered files. In the last case, the files must have names which contain a number sequence like anim001.tga, anim002.tga, anim003.tga…, and must all be in the same directory.

An animation may be an animated version of a typical on-air logo, which has both fill and key elements for overlaying a small portion of the video picture.

Analog Clock Features

Analog clocks[1] consist of three separate graphics elements (four, if a moving seconds hand is required), each of which is effectively a logo that consists of both fill and key elements. The graphic sources for these elements are selected from the Logo menu, in the same way as sources are selected for static logos and animations. The elements required for an analog clock are

- Face graphic – a graphic showing the clock face
- Hour hand graphic – Shown in the 12 o'clock position
- Minute hand graphic – Shown in the 12 o'clock position
- Second hand – Shown in the 12 o'clock position

The rotation center for the hands and face may be altered at any time during setup. When they are first selected they are automatically set to be as follows:

- For all hands:
  - Horizontally – central
  - Vertically – 5% of the vertical height of the graphic from the bottom
- For the face:
  - Horizontally – central
  - Vertically – central

A time offset from a central time source can be set up for each clock logo.

Digital Clock Features

Digital clocks consist of a face graphic and a graphic containing the digits 0-9 and other characters required by the time and temperature display. Digital clocks have the following features:

- Time with or without seconds
- Time with temperature (in either order)
- Temperature on its own

[1] On systems with MGI-3901 modules, you are limited to two analog clock layers. On systems with MGI-3902 and MGI-3903 modules, you can have up to four analog clock layers. See the *MGI-390x IconLogo Modules Product Description and User Information Manual* for more information.

- 12-hour or 24-hour time display
- Variable font spacing
- Variable separation between time and temperature
- Adjustable positioning of characters on background
- Centigrade or Fahrenheit display (with or without degree symbol)
- Time offset from a central time source (offset can be set up for each logo)

External inputs for time code (either LTC or DCF) provide synchronization for real time on-air clocks. An internally-generated time code may also be used.

Quick Select Feature

Quick select is essentially a macro logo. It allows you to trigger up to four logos (on four layers) simultaneously as a single logo. Quick selects can be created using the IconLogo soft panel.

Text Crawl and Titling Features

Text can be either a static object or a crawling object. Text is entered through the keyboard. The text can consist of 1 to 12 independent sentences for Text Titling or an unlimited number of independent sentences for Text Crawl, though limited to 5000 characters total. Each sentence can have its own fonts, spacing, color, and origin.

Logo Storage

Note

Using LogoCreator and MG2 logo format could significantly reduce memory utilization.

The IconLogo supports the following two types of storage:

- On Line Storage

  On line storage is a volatile DDR DIMM used for logo playout. The device can be ordered in different memory capacities and can be upgraded to a larger capacity later.

  Note

  IconLogo also supports the concept of virtual storages. They allow you to group logos using meaningful names like “evening news” and “morning news.”

- Near Line Storage

  Near line storage is Compact Flash memory. Compact Flash cards can be purchased in capacities of up to 8 GB.

The advanced logo management feature allows you to load only logos you need into DDR2, not all the logos stored in the near line storage device.

Logo Creation and Transfer

Logo Creation

The IconLogo supports two mechanisms for logo creation.

- Internal conversion within the IconLogo unit

  Internal logo creation involves the transfer of graphic files to the IconLogo through FTP, or the physical insertion of a Compact Flash card. This operation uses the IconLogo soft panel. Conversion to internal playout format happens on the fly every time the logo is loaded into DDR from local storage.

- Externally using LogoCreator

  External logo creation uses the Windows-based GUI application, LogoCreator. It allows the creation of logos from fill and key graphic files and stores them as an mg2 logo file.

Logo Transfer

The IconLogo supports several transfer mechanisms.

- File Transfer Protocol (FTP)

  FTP allows the transfer of graphic content from a PC to the device. It requires a third party FTP GUI application.

- Physical insertion of a Compact Flash memory card

  Physical transfer on a compact flash memory card requires a compact flash reader on a PC. It involves manual interactions for each transfer.

- Logo Transfer Protocol (LTP)

  LTP allows logo transfer using a Windows Explorer plugin developed by Leitch. Logos created using LogoCreator can be transferred directly to the MGI-3903.

Connecting an IconMaster to an EAS Device

The federal Emergency Alert System (EAS) enables broadcasters, cable providers, and emergency managers to receive, store, forward, and originate emergency alert messages as required by the Federal Communications Commission. EAS allows broadcast stations, cable systems, participating satellite companies, and emergency managers, and other services to send and receive emergency information quickly and automatically, even if these facilities are unattended. Specially equipped devices decode EAS messages for distribution.

The IconMaster can be connected directly to an EAS encoder/decoder or character generator, thus enabling you to insert emergency notification messages directly into the broadcast stream as a regular scrolling text crawl.

An external EAS receiver is required to allow this feature to become operational. For details please contact Customer Service.

Communication Protocols

The IconLogo currently supports three communication protocols employed by EAS devices: TFT[1], Sage[2], and Gorman-Redlich (GR)[3].

RS-232 Connection

The EAS device is connected to the RS-232-D port on the IconMaster ICONM-BO-V breakout module. If the IconMaster ICONM-BO-V breakout module is not being used, the EAS device must be wired directly to the Multi-Function I/O connector on the MKE-3901-BM. Pins 57 (RS-232-D-RX) and 58 (RS-232-D-TX) are reserved for this purpose. See IconMaster Installation and Configuration Manual for more details.

Configuring the EAS Device

For basic configurations and preparations please see the specific EAS device user manual. No additional special settings are needed to communicate with an IconMaster. The standard signal will be taken out from the EAS device's serial port. See "EAS Logos Menu" on page 295 for more information.

[1] "TFT" is a trademark of TFT Inc., San Jose, California.
[2] "Sage" systems are products of Harris Corporation, Melbourne, Florida.
[3] Gorman-Redlich Manufacturing Co., Athens, Ohio.

Appendix B

Logo Creation

Overview

This chapter describes how to create logos with IconLogo. The following topics are found in this chapter:

- “What Makes a Logo?” on page 242
- “Using the IconLogo Soft Panel to Create Logos” on page 243
- “Navigating the Logo Menu” on page 245
- “Navigating the File Menu” on page 275
- “Navigating the Engineering Menu” on page 278

What Makes a Logo?

In its most basic form, a logo consists of a single fill source and a single key source. The *fill* is the picture or image you wish to overlay onto the program output. The *key* is the cutout or shape of the logo, which may or may not be the same shape and size as the fill.

For more complex logo forms (clocks and animations), several fill and key sources are required. All, however, are selected and created in the same way from the control panel.

As an example, a typical fill source and key source are shown in Figure B-1. In the fill source, the image extends beyond the required bounds of the logo. The key defines the shape of the logo (shown rendered over a matte background in Figure B-2), cutting out any areas that are shown black in the key.

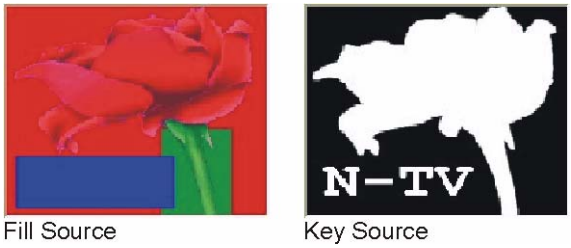


Figure B-1. Fill Source and Key Source

Figure B-2. Resulting Logo Rendered over Matte Background

A logo may be one of the following basic types:

- **Static logo** – a stationary graphic
- **Animated logo** – multiple graphics files comprising a sequence that forms a moving logo
- **Analog clock** – sweeping hands moving over a fixed clock face
- **Digital clock** – changing digits on a fixed background with or without temperature
- **Quick Select** – logo item that defines a combo; composed of up to four logos, one on each layer
- **Text Crawl** – single line of text that moves from right to left
- **Text Titling** – multi-line static text

For each of these the fill source can be one of the following:

- A graphics file in one of the formats supported (see page 235)

- An internally generated matte color

The key source can be one of the following:

- A graphics file in one of the formats supported
- The alpha (or key) channel of the fill file currently being used where the graphics format supports it (e.g., MGI and Quantel PaintBox formats)
- An internally generated, soft-edged, bounding-rectangle for the entire fill source; softness is limited to a single line and pixel on each edge of the bounding rectangle to prevent high-frequency ringing effects
- A Self key – producing a key from the luminance of the fill source

Using the IconLogo Soft Panel to Create Logos

IconLogo creates logos by loading graphics files in their raw format directly into the system's on-line storage. This means that creation of a logo can be as simple and as quick as finding a file using the system's File menu and then pressing a single button. Any repositioning and changing of other logo attributes can be done at any time – live from the control panel or control panel GUI. Changing a logo, therefore, can be as simple as taking an existing logo and changing the source file (or even replacing the old file with a new one).

Because of the simplicity with which logos can be created, modified, and deleted, the creation side of the IconLogo can be locked with a key code (which may be changed). This code, entered in the Engineering menu, consists of a numeric value in the range from 1 to 999999. The key code locking mechanism can be permanently disabled, but Harris recommends that you leave it enabled and only give the code to operators who need Write access. For full details of the operation of the key code locking, refer to "Set-Up Modify" on page 280.

Navigating the Control Panel Menus

Note

Wrapping may be enabled through the **Menu Wrap** parameter described in Set-Up Menu Page (see page 279) so that the last parameter on the Page wraps onto the first.

Most pages consist of a list of parameters, which have been grouped together (where possible) into logical sections. You can access each parameter by using the soft pots, as follows:

- The top soft pot, scrolling clockwise, moves horizontally through the parameters on the page and wraps onto the row below when on the last parameter on any row. When scrolling counter-clockwise, it does the reverse, wrapping onto previous row.
- The bottom soft pot acts similarly, but moves through the list vertically only and will not wrap onto the next/previous column having reached the last/first item on the page.

As each parameter is selected, it is highlighted in the list and soft button labels change to reflect the options for setting the parameter.

When an adjustable parameter is selected (by pushing the lower soft pot), the soft pots may then be used to adjust the parameters. When there are two parameters, the upper soft pot will adjust the first parameter and the lower soft pot will adjust the second parameter. When there are three parameters, the soft buttons may be used to select which parameters are adjusted by the soft pots. Adjustable parameters (usually preceded by a "#") may be set to their default values by double clicking the soft button for that parameter.

Most parameters have an option selection window that pops up to enable fast access to and soft pot control of its various options.

When using the IconLogo soft panel, use the arrow keys on the PC keyboard to navigate through the menu lists.

To use the **Options** selection windows:

1. Press and release the bottom soft pot. The **Options** window appears (see Figure B-3).
2. Rotate the bottom soft pot to select the required option.
3. Press the bottom soft pot button again to confirm your selection.

To use the **Control Panel** GUI:

1. Right click on the mouse to display the **Options** window (see Figure B-3).
2. Use the arrow keys to navigate through the options list.
3. Right-click on the mouse to confirm your selection.

Figure B-3. Options Window

Figure B-4. Logo Menu with New Static Logo

Soft Buttons

There are four basic types of soft buttons in the Logo menu:

- Numerical parameter entry (normally preceded by the # symbol); e.g., **# Opacity**
- Option selections; e.g., **Normal Invert**
- Submenu of more soft boxes; these are followed or preceded by an ellipsis ("..."), depending or whether they go to a new selection or return from a previous one; e.g., **Copy/Clear...**
- Link to another menu followed by an ellipsis ("..."); e.g., **Fill File...**, the link to the file menu for selecting a Fill File
- When using the IconLogo soft panel, use the mouse to select the soft buttons.

Navigating the Logo Menu

You can enter the Logo Menu by selecting the **Logo** menu button. The Logo menu allows you to create and delete logos and to view and update logo details.

If your system does not have any logos, the menu will look like Figure B-5 on page 246. If there are no logos, you will need to create a logo before you are able to use the other features in this menu. Refer to the **# Create** button (page 247).

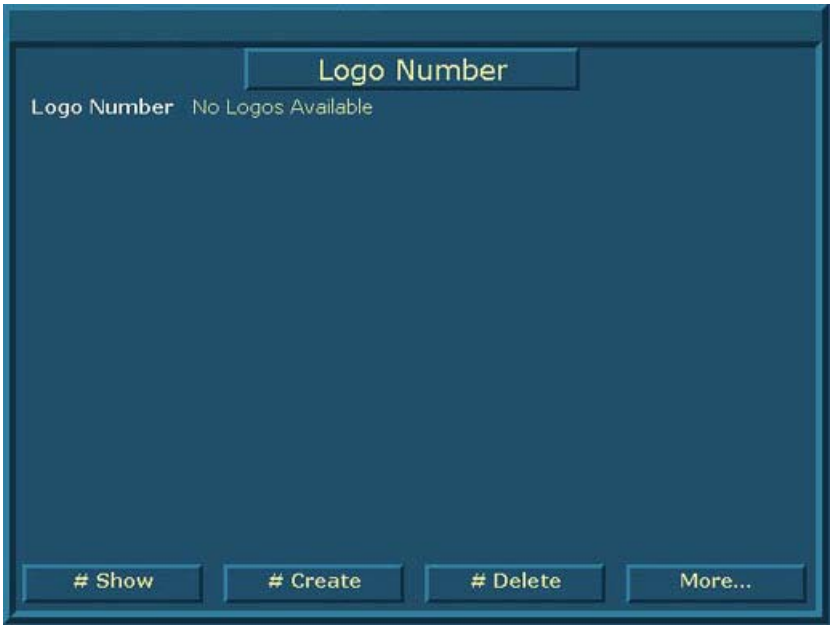


Figure B-5. Logo Menu with No Logos Available

If logos already exist in your system, the menu will look similar to Figure B-6.

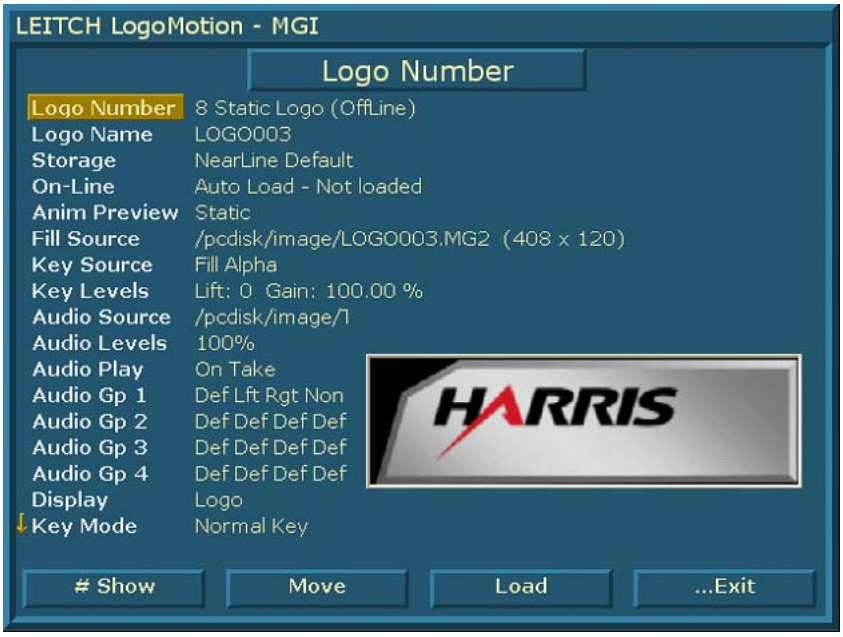


Figure B-6. Logo Menu showing a Static Logo

Note

The logos may have more parameters than can be displayed on one page, so when the bottom of the list is reached the page scrolls to reveal more parameters.

The Logo menu allows you to change and display the logo parameters for a single logo. The logo being displayed can be changed several different ways:

- Enter a logo number, then press the Logo menu button (i.e. direct selection).
- Press the # **Show** soft button if the top menu item is selected.
- Scroll through the list of on-line logos.

Logo Number

Indicates the logo slot, type, size and on-air/preview status (if applicable) of the logo. The following selections are available:

- **# Show** displays the entire logo list.
  - **# Show** returns to the logo menu.
  - **Unload/Load** will unload or load the logo from/to DDR memory.
  - **Storage** changes to the Storage List menu. See “Logo Storage” on page 273 for details.
- **# Create** will create a new logo. The next available logo number will be automatically selected. To manually assign a logo number, enter the logo number using the keypad before selecting **# Create**. You will be presented with a choice of different types of logos to create.
  - **Static** is a stationary graphic.
  - **Animation** shows multiple graphics files comprising a sequence that forms a moving logo.
  - **Digital clock** shows changing digits on a fixed background with or without temperature.
  - **More...**
    - **Analog Clock** shows sweeping hands moving over a fixed clock face.
    - **Text Crawl** shows text with configurable crawling speed and selectable fonts.
    - **Quick Select** is a virtual logo that combines up to 4 logos on each layer of a single logo.
    - **...More**
      - **Text Title** shows multi-line static text.
      - **Cancel** returns to the main logo menu.
      - **...Exit** returns to the main create menu list.
- **# Delete**
  - **...Erase** removes both the logo file and the graphics files from compact flash.
  - **...Cancel** returns to the previous menu.
  - **...Unload** will unload the logo from DDR memory.
  - **...Delete** removes only the logo file from compact flash.
- **More...**

- **# Show** displays the entire logo list.
- **Move** allows you to change the logo number of the selected logo within the logo list.
  - **# Copy** will create a copy of the selected logo. To do this, first enter the new logo number on the keypad on the right, then press this soft button to copy the logo.
  - **Cancel** returns to the previous menu.
  - **# Renumber** is used to renumber the selected logo. To do this, first enter the new logo number on the keypad on the right, then press this softbound to change the logo number.
- **# Backup** not currently available.

- **Unload/Load** unloads or loads the selected logo from/to DDR memory.
- **...Exit** goes back to the previous menu.

Logo Name

When a logo is created, it takes its name from the fill file used. If no fill source is used, then the key file name is used. The name given to the logo may be changed if required. The following selections are available:

- **Change…** selects an input area for typing in the new name and gives the following selections:
  - **As Before** puts the existing name in the input area.
  - **Clear** clears any characters typed in the input area
  - **…Cancel** goes back to the previous menu
  - **…Enter** selects the characters present in the input area if nothing was entered then the name reverts back to the Fill or Key file name.
- **Clear** selects the logo name from the Fill or Key file name, removing any created name.

Storage

This selection indicates the storage grouping for the selected logo. The following selection is available:

- **# Storage** displays the storage select menu. See “Logo Storage” on page 273 for details.

On-Line

This selection indicates whether the logo is automatically loaded or manually loaded to the DDR memory on startup. It also indicates whether the logo is currently loaded or unloaded.

- **Automatic** - logo is loaded to the DDR memory automatically at startup.
- **Manual** - logo has to be manually loaded to the DDR memory.

Note

When “Manual” is selected for the On-Line parameter, On-Air and Preview logos will still be loaded to Air/Preview if the “Restore” option is selected in the Engineering menu.

Anim Preview

This selection indicates the number of frames the animation has. For a static logo, the status will indicate “Static.”

Fill Source

The fill source is the main source of graphical information in a logo. It defines the video content of the logo that will be seen on screen and normally defines its size as well.[1]

To select the logo fill source**,** scroll down to the Fill Source selection on the Logo menu. The menu will look like the one shown in Figure B-7.

Figure B-7. Logo Menu Selecting New Fill Source

There are three choices for selecting a fill source, as shown by the first three soft buttons. (The fourth selects a way to copy information between fill and key sources.) The process involved in selecting each of these sources is described separately.

- **Fill File…** selects the File menu from which you select a file.

[1] This item is not applicable to Text Crawl or Text Titling logos.

- **Ext. Fill**[1]
- **More…** selects another set of Fill source selections. Options are as follows:
  - **Matte** uses an internal matte color generator as the fill source.

    Matte color may be used with any non-internally generated key source to fill the key shape with a single matte color.

    Adjust Matte allows adjustment of the matte parameters.
    - **# Luma** requires you to enter a value for the luminance.
    - **# Sat** requires you to enter a value for the saturation.
    - **# Hue** requires you to enter a value for the hue.
    - **Grab Select...**[1]
- **Copy/Clear…** selects a new set of soft button options that allow copying and swapping of sources between fill and key. These options are as follows:
  - **Clear** clears the current fill selection.
  - **Swap** swaps fill and key sources.
  - **Copy Key File** copies the key file selection to be the fill source as well.
  - **Exit…** returns to the main Fill Source selection.

When Fill file is selected from the Logo menu, the menu changes automatically to the Pick Fill submenu. You will be presented with a selection of files and a set of soft buttons that enable you to find, view, and select the Fill file (see Figure B-8).

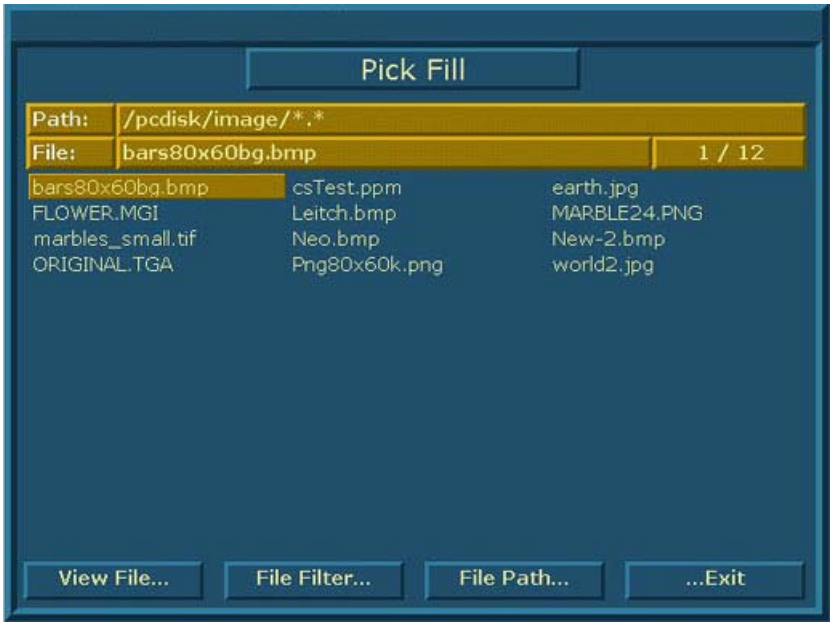


Figure B-8. Picking a Fill File

[1] This parameter does not apply in the IconMaster configuration.

A full explanation of navigating through the directory structure and different file systems in the File menu is presented in “Navigating the File Menu” on page 275, but for the purpose of selecting a Fill file, we will assume that the file you require is in the directory that the File menu was last looking at.

To select a file at the **Pick Fill** submenu:

1. Use the top soft pot to skip the highlighted file selection backwards and forwards one file at a time and/or use the bottom soft pot to skip up and down one column at a time.

   (To abandon the search for the fill file and return to the Logo menu, press the **Exit** soft button.)

2. When you find the Fill file, press the **View File…** soft button. The menu will change to show a preview of the image in the file (if of a usable format) and all the available information about the file. See Figure B-9 for an example.

3. You may use the soft pots to slowly browse through the next/previous file in the directory or, you may press the **Exit** soft button to return to the Pick Fill submenu.

4. If the file is the one required for the logo, press the **Select** soft button. The system will return to the Logo menu, and the selected Fill file and its full path will be shown in the Fill Source selection.

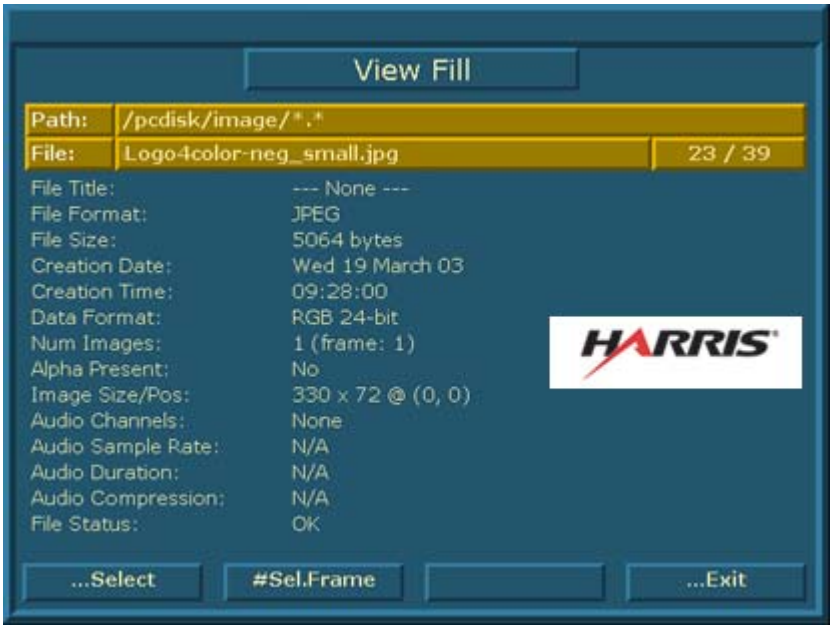


Figure B-9. Viewing a Fill File

Most logos will be derived from a Fill file, so when a file is selected as the Fill source for a new logo, IconLogo looks for alpha information in the file from which to derive a key. Failing this, it simply assigns a box key (or soft-edged bounding rectangle) so that the whole of the fill source is visible on screen.

Key Source

The key source associated with a logo determines how much of the logo's fill source will appear over the main program video. The key source is the primary source of shape and transparency information for the logo. It is the quality of the key that determines the quality of the overlay for use in channel idents, where picture information needs to be seen through the graphic. It also determines the quality of the feathering (or *anti-aliasing*[1]) on the edges to provide apparently smooth transitions between background program video and graphics.[2]

The simple example in Figure B-1 on page 242 shows a fill source, an associated key source; the resulting logo (see Figure B-2 on page 242) would display as a logo over a background. Notice that where the key is black (0%) there is no foreground logo visible, and where the key is white (100%) there is no background visible. All other levels produce a proportional mix between background image and logo fill. Each logo can take its key source from a number of internally and externally generated sources. The most commonly used will be the key file, normally produced by the graphic artist at the same time as the fill source. Some file formats allow storage of both fill and key source in the one file. This is sometimes known as an *alpha channel*[3] for the file.

There are six key sources for IconLogo logo elements. These are picked from one of two Key Source soft button selections of the Logo menu. The first selection shows the following items:

- **Key File…** selects the File menu from which you can pick a key file.
- **Ext. Key**[4]
- **More…** selects another set of key source selections.
  - **…Box** selects a soft edged bounding rectangle for the fill source.
  - **…Self** derives a key from the luminance content of the fill source.
  - **…Fill Alpha** takes the key from the alpha channel of the fill file (if it has one).
  - **…Exit** returns to the main **Key Source** soft button selection.

---

[1] *Anti-aliasing* is a software technique for diminishing "jaggies" (stairstep-like lines that should be smooth). Anti-aliasing reduces the prominence of jaggies by surrounding the stairsteps with intermediate shades of color. Antialiasing is sometimes called *oversampling*. (Copyright 2003, Jupitermedia. All rights reserved. Reprinted with permission from http://www.internet.com.)

[2] This item is not applicable to Text Crawl or Text Titling logos.

[3] A *filter* is an effect that can be applied to a bitmapped image. Only data that matches a defined pattern is allowed to pass through the filter. An *alpha channel* is a filter that selectively includes or excludes certain values. Typically, you wouldn't define an alpha channel on a pixel-by-pixel basis, but rather per object. Different parts of the object would have different levels of transparency depending on how much you wanted the background to show through. This allows you to create rectangular objects that appear as if they are irregular in shape — you define the rectangular edges as transparent so that the background shows through. (Copyright 2003, Jupitermedia. All rights reserved. Reprinted with permission from http://www.internet.com.)

[4] This parameter does not apply in the IconMaster configuration.

- **Copy/Clear…** selects a new set of soft button options which allow copying and swapping of sources between fill and key. These options are as follows:
  - **Clear** clears the current key selection.
  - **Swap** swaps fill and key sources.
  - **Copy Fill File** copies the fill file selection over to be the key source as well.
  - **Exit…** returns to the main **Key Source** soft button selection.

A description of each of the key sources follows, along with an explanation of how to select them from the main Key Source selection of the Logo menu.

When **Key File** is selected from the Logo menu, the menu changes automatically to the **Pick Key** submenu of the **File** menu. Here you will see a selection of files and a set of navigation soft buttons that enable you to find, view, and select the **Key** file (see Figure B-10).

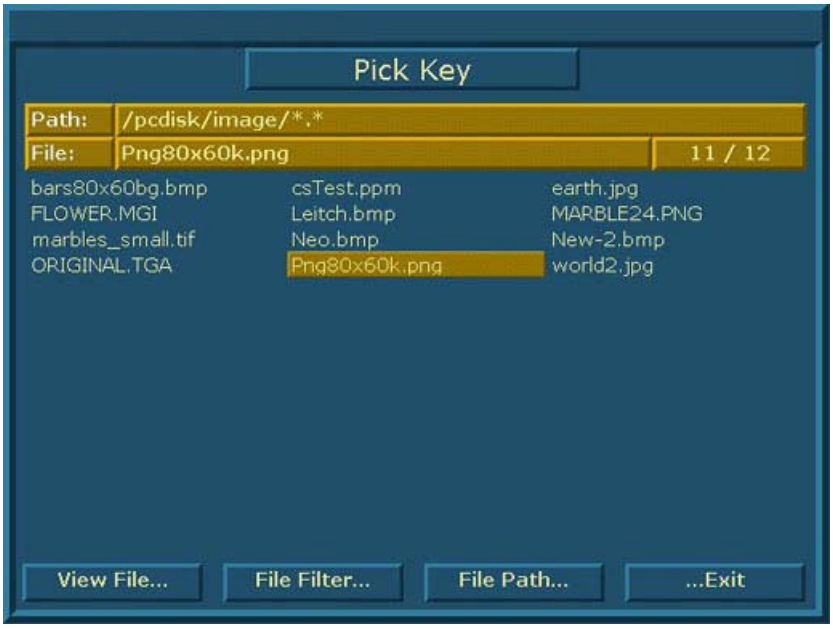


Figure B-10. Picking a Key File

A full explanation of navigating through the directory structure and different file systems in the File menu is presented in Navigating the File Menu (page 275), but for the purpose of selecting a key file, we will assume that the file you require is in the directory that the File menu was last looking at.

To select a file in the **Pick Key** submenu:

1. Use the top soft pot to skip the highlighted file selection backwards and forwards one file at a time and/or use the bottom soft pot to skip up and down one column at a time.

   To abandon the search for the key file and return to the Logo menu, press the **Exit** soft button.

2. When you have found the required key file, press the **View File…** soft button. The menu will change to show a preview of the image in the file (if of a usable format) and all the available information about the file (see Figure B-11 for an example).
3. Use the soft pots to browse through the next/previous file in the directory; or, press the **Exit** soft button to return to the **Pick Key** submenu.
4. If the file is the one required for the logo, press the **Select** soft button. The system will return to the Logo menu; the selected key file and its full path will be shown in the Key Source selection.

Figure B-11. Viewing a Key File

As a logo may consist of a key source filled with an internally generated matte color, whenever a key file is selected on a logo that does not have an assigned fill source, the matte source is automatically selected for the fill source. Where the logo already has a fill source assigned, the fill source remains unchanged.

The box key is an internally generated rectangular box that exactly fits around the selected fill source. In a fill file, the box generated is the same size as the fill source, but with anti-aliased or softened edges to prevent ringing where bright colors may be used in the fill graphic.

To select the box key source:

1. Select the **More…** soft button.
2. Select the **…Box** soft button. The menu will return to the main soft button selection.

Note

Whenever Self Key is selected, the Matte Key mode is selected automatically, as this is the only mode that normally works with self keys. See “What Makes a Logo?” on page 242 for more details.

Some logo sources (normally containing luminance information only) are designed to be both key and fill source for the logo. These can be keyed by selecting the **More…** soft button from the Key Source selection, then selecting the **…Self** soft button.

With **Self** key selected, the key source is derived from the luminance content of the Fill source, which must be a Fill file.

Some graphic file formats are designed to contain the fill and key information in the alpha channel.[1] The file formats that may contain readable alpha channels are

- MGI – the previous generation IconLogo file format generated by LogoCreator
- SGI – Silicon Graphics Image format
- TGA – TrueVision Targa file format
- VPB – Quantel Video PaintBox image format

Each of the above formats can support, but does not necessarily contain, alpha information. The Fill Alpha selection will only work when a fill file exists which contains valid alpha information.

To select alpha fill:

1. Select the **More…** soft button from the Key Source selection.
2. Select the **…Fill Alpha** soft button.

To delete a logo from the Logo Menu, select “Logo Number” (the top item), then press the **# Delete** soft button.

Key Levels

This selection allows the key to be adjusted for lift and gain. To change the value, use the keypad to enter the new value, then select the appropriate soft button to make the change.

- **# Key Lift** - Lift 0 to –876 (Default 0)
- **# Key Gain** - Gain 0 to 800% (Default 100%)[2]

[1] See page 252 for a definition of an alpha channel.

[2] This item is not available for analog for External Key/Fill.

Audio Levels

This is the mix ratio to use when mixing this logo's audio with program. From 0 to 50%, program will be at full volume and logo audio will increase linearly from zero to full volume. At 50% both program and logo audio will be at full volume. From 50-100% logo audio will be at full volume and program audio will decrease linearly from full volume to nothing.

Audio Grp 1, 2, 3, 4

Pressing "Ch x" will cycle between 4 options for that particular audio channel.

Def: Use the setting for this channel from the Engineering Menu

Rgt: Insert the logo right audio channel

Lft: Insert the logo left audio channel

Non: Don't insert logo audio

Display

This selection selects how the logo is displayed on the control panel.[2]

- **Logo** displays logo as it would appear on air.
- **Fill** displays just the fill source.
- **Key** displays just the key source.

Key Mode

This selection selects how the logo is keyed.[1]

- **Normal** indicates the selected key is uninverted.
- **Inverted** indicates the selected key is inverted.
- **Key Mode** indicates the selected key is keyed to the fill source.
- **Matte Mode** indicates the selected key is matted to the fill source.

Logo Audio

This selection determines the audio that plays with the logo.

Note

Logo audio is available with MGI-3902/MGI-3903 only.

See page 63 for information on adding audio to a logo.

Position

This selection selects the position the logo will take on the screen.[2] The position relates to the top left hand side of the logo's bounding rectangle. To change the value, use the keypad to enter the new value, then select the appropriate soft button to make the change.

[1] This item is not available for analog for External Key/Fill.

[2] This item is not applicable to Text Crawl or Text Titling logos.

Note

Double-click the numeric entry soft buttons such as **#X** to return to the default values. Most defaults are set up in the Engineering menu (see Navigating the Engineering Menu page 278).

- **# X** accepts the horizontal pixel position entered into the number pad.
- **# Y** accepts the vertical pixel position entered into the number pad.
- **Presets…**
  - **Horizontal**
    - **Left** sets the horizontal position to the far left of the screen.
    - **Centre** sets the horizontal position to be in the center of the screen.
    - **Right** sets the horizontal position to the far right of the screen.
    - **Exit** returns to the Logo menu.
  - **Vertical**
    - **Top** sets the vertical position of the logo to the top of the screen.
    - **Centre** sets the vertical position of the logo to the center of the screen.
    - **Bottom** sets the vertical position of the logo to the bottom of the screen.
    - **Exit** returns to the Logo menu.
  - **File Default** uses the default position information from the source file used in the logo if it is present (only certain graphics file formats can contain position information).
- **Exit** returns to the Logo menu.

Opacity

This selection selects the opacity of the logo. To change the value, use the keypad to enter the new value, then select the soft button to make the change.

- **# Opacity** shows the opacity range 0 – 100%, where 0 will be invisible and 100% will be fully opaque.

Fade Rates[1]

Next Logo[1]

Off/Air Action[1]

[1] This parameter does not apply in the IconMaster configuration.

Source Num

This selection selects the automation Aux bus source select number (range from 1 to 16). To change the source, use the keypad to enter the new source, then select the soft button to make the change.

- **# Source** changes the source select number.
- **Clear** clears the current source select number.

Fill Offset

This selection offsets the fill file position relative to the key, such as when the two files are of different sizes. It may also be used if a fill file is larger than the screen resolution to center the image.[1]

- When the fill is larger than the key only negative numbers are accepted.
- When the fill is smaller than the key only positive numbers are accepted.

To change the value, use the keypad to enter the new value, then select the soft button to make the change.

- **# Offset X** changes the X offset.
- **# Offset Y** changes the Y offset.

[1] This item is not applicable to Text Crawl or Text Titling logos.

Animation Logos

The fill and key source fields for animations differ from those for static logos, as they must specify a source of multiple images. This normally means specifying either multiple files or a file that contains multiple images.

If you specify multiple image files, they must be in the same directory, be of the same size and type, and have an ascending numeric sequence as part of their name. The numeric part of the file name must have the same number of digits.

For example, the following sequence specifies a 240 frame animation in the Targa format:

- myAnim0001.tga
- myAnim0002.tga
- myAnim0003.tga
- myAnim0004.tga
- myAnim0005.tga
- myAnim0006.tga
- myAnim0238.tga
- myAnim0239.tga
- myAnim0240.tga

When selecting a file sequence, select the first file in the sequence as the fill or key source. IconLogo will look for all other files in the directory that form part of the same numeric sequence.

Some graphics file formats contain multiple images. These may be selected as the fill or key source for animations. The graphics file formats supported that may contain multiple images for animations are as follows:

- MGI – the previous generation IconLogo file format generated by LogoWin
- VPB – Quantel Video PaintBox image format

The method for selecting the fill and key sources for animations is the same as for static logos. When selecting one of the multiple image file formats (described in Fill Source or Key Source) as the source for animation fill, the File menu will show the number of frames contained in the file.

Anim Preview

Note

The following menu items will only be available for logos with animation.

This selection indicates which frame of the animation is currently displayed and the duration of the entire animation.

- **Play/Stop** will play the animation if it is stopped or stop the animation if it is being played.

- **# Goto Frame** - will take you to a specified frame. To go to a particular frame of the animation, enter the frame number on the keypad and select this soft button.
- **< Prev Frame** will return you to the previous frame. It will not wrap around if the current frame is the first frame.
- **Next Frame>** will go to the next frame. It will not wrap around if the current frame is the last frame.

Cue Action

This selection selects how the animation starts when put on air.

- **Cue**[1]
- **Run** indicates the animation will come on air running.
- **Fade…Run**[1]
- **# Delay**[1]

Wait Action[1]

End Action

This selection selects how the animation behaves after the wait action.

- **Stop** stops at the last frame of the animation sequence.
- **Recue** recues the animation to the first frame of the sequence and waits.
- **Replay** continues the animation from the first frame of the sequence.
- **More…**
- **Fade Down**[1]
- **Clear Logo**[1]
- **Next Logo**[1]
- **More** returns to the previous menu.

Anim. Rate

This selection selects the speed of the animation, where a value of “2” would indicate 2 video frames duration for playing each animation cell.

Loop Start, End, and Repeat

Note

Enabling the LogoCreator software application **Embed Nested Loop** check box will allow 3- or 4-point logo parameters to be entered. If this selection is not enabled, the resulting MG2 file will operate like a regular animated logo.

[1] This parameter does not apply in the IconMaster configuration.

These selections allow you to set up 3- or 4-point looping, animated logos.

- A 4-point logo is an animated logo that will loop only a portion of itself. The animation sequence contains an introductory animation, an animation loop, and an exit animation. This sequence will be presented as a single animated logo that defines a starting and ending point for the loop.

Figure B-12. Four-Point Animation Logo Model

- A 3-point logo is similar to a 4-point logo, except that it has no exit portion. (It can also be visualized as a 4-point logo where the loop-end point is the same as the animation-end point.)

Figure B-13. Three-Point Animation Logo Model

Loop Start

This selection allows you to set the frame at which the introductory animation sequence ends and the animation loop begins.

Loop End

This selection allows you to set the frame at which the animation loop sequence ends and the exit loop begins. For a 3-point logo, the **Loop End** parameter needs to be set to the same value as the last frame of the entire animation.

Loop Repeat

This selection allows you to determine the number of times the embedded loop portion will run before finishing the animation. Setting the Loop Repeat parameter value to “1” will force the looping animated logo behave the same as a regular animated logo.

Analog Clock Logos

An analog clock[1] in IconLogo requires graphics for the clock face and each of the hands (in the 12 o’clock position). These are specified the same way as for a static logo. The logo menu for an analog clock is shown in Figure B-14.

[1] On systems with MGI-3901 modules, you are limited to two analog clock layers. On systems with MGI-3902 and MGI-3903 modules, you can have up to four analog clock layers. See the *MGI-390x IconLogo Modules Product Description and User Information Manual* for more information.

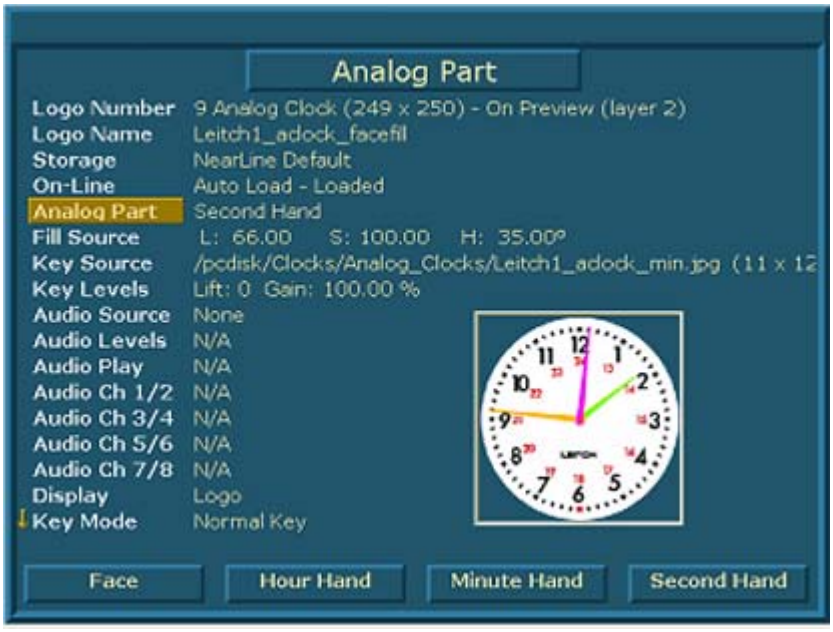


Figure B-14. Analog Clock Menu

The following menu items will only be available for an Analog Clock logo.

Analog Part

This selection indicates which analog clock component is selected and allows you to set up the source as described in “Key Source” on page 252, except that external sources are not permitted.

- **Face** - allows set up of the fill source for the face.
- **Hour Hand** - allows set up of the fill source for the hour hand.
- **Minute Hand** - allows set up of the fill source for the minute hand.
- **Second Hand**[1] - allows set up of the fill source for the second hand.

The analog clock face graphic should be large enough so that all 3 hands are within its bounds for the entire 360° sweep of the clock about their respective rotation centers.

- In SD, the result of a hand failing to fall inside the face is that the hand is clipped at the edge of the bounding rectangle of the clock face graphic.
- In HD, the result of a hand failing to fall inside the face is that
  - If the hand can fit inside the clock face, it will be moved by the minimum amount required to fit it on the screen; but, as an indication that it has done so, it will be reduced to 50% opacity.
  - If the hand cannot fit inside the clock face at all, the clock face will fail to show the hand and the clock face opacity will be reduced by 50%.

[1] The second hand is optional; a clock may run with only the face, hour hand, and minutes hand specified.

Time Offset

This selection allows the displayed time to be offset relative to the internal time reference.

- **# Offset** - enter the offset time on the numeric keypad, then select this soft button to change the offset.

Rotate Centre

When an analog clock element is selected, the rotational center of that element is calculated by IconLogo and appears in the Rotate Center field of the Logo menu. The position of the Rotate Center is the position in pixels and lines relative to the top left corner of the graphic about which the hands rotate. This may be altered at any time after the clock element has been selected.

- **# Centre X** changes the X coordinate.
- **# Centre Y** changes the Y coordinate.

Note

A large analog clock, or several smaller clocks, may reduce the response time for the control panel interface.

Face Aspect

This selection indicates the adjusted size of the hands on the clock in order for it to fix properly in the face.

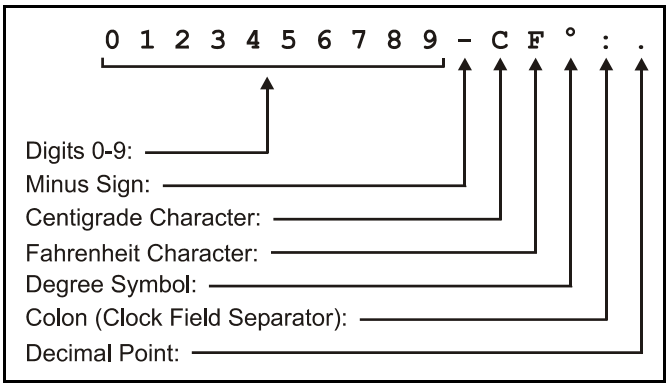
- **Square Pix.** - adjusts the hands to fit a standard face size.
- **4 x 3** - adjusts the hands to fit a 4×3 face size.
- **16 x 9** - adjusts the hands to fit a 16×9 face size.

Digital Clocks

A digital clock in IconLogo requires graphics for the clock background and a font file for the clock display. The face graphic file forms the background for the clock onto which the clock digits are rendered. It is specified as a normal static logo would be, except that external sources are not permitted.

The font files for fill and key are not standard font files. They are graphics files containing the pre-rendered digits and characters required by the clock for both fill and key. These must be rendered onto a background in the correct style size and color for your required clock font. Unlike other elements for IconLogo logos, a key file must be specified, as it is the key file that is used to specify the font characters' cell sizes and spacings.

An associated fill file may be created for the font, or a matte fill can be used. The characters must be rendered in a single line and in the order shown below. Characters must not overlap or contain any other information on another line.


0 1 2 3 4 5 6 7 8 9 - C F ° : .
Digits 0-9:
Minus Sign:
Centigrade Character:
Fahrenheit Character:
Degree Symbol:
Colon (Clock Field Separator):
Decimal Point:

The size of the font will change, depending on your requirement; however, Harris recommends a size of 24 points as a starting point.

Figure B-15 and Figure B-16 show example font key and fill files as required by IconLogo. Figure B-17 shows an example face fill for a digital clock. The face key is assumed to be a rectangle.

Each of these is specified in the same way as for a static logo.

Figure B-15. Font Key Source

For best results, the fonts created in the font key source file should be anti-aliased. (See page 252 for an explanation of anti-aliasing.)

Note

To insert a degree symbol (°), hold down the <Alt> key while simultaneously typing 0176 on the numeric keypad.

Figure B-16. Font Fill Source

Figure B-17. Digital Clock Face Fill

Figure B-18 shows the resulting rendered digital clock using the font files shown in Figure B-15, Figure B-16, and Figure B-17.

Figure B-18. Digital Clock Rendered Over Background

The Logo menu for a new digital clock is shown in Figure B-19. This example shows the “Digital Part” field selected.

Figure B-19. Logo Menu Showing New Digital Clock

The following menu items will only be available for a Digital Clock logo.

Digital Part

This selection indicates which digital clock component is selected and allows you to set up the source as described in “Fill Source” on page 249, except that external sources are not permitted.

- **Face** - allows set up of the fill source for the face.
- **Font** - allows set up of the fill source for the font.

The digital clock face graphic should be large enough so that the rendered digits should fit within its bounds.

- In SD, the result of the rendered digits failing to fall inside the face is that it is clipped at the edge of the bounding rectangle of the clock face graphic.
- In HD, the result of the rendered digits failing to fall inside the face is that

- If the rendered digits can fit inside the face, they will all be moved the minimum amount required to fit them on the screen, but as an indication that it has done so, they will be reduced to 50% opacity.
- If the rendered digits cannot fit inside the clock face at all, the clock face will show blank and the clock face opacity will be reduced by 50%.

Once the clock face fill file, font fill, and key sources are assigned, you can use the following menu items to select the representation of time and temperature.

Time Offset

This selection allows the displayed time to be offset relative to the internal time reference.

- **# Offset** - enter the offset time on the numeric keypad, then select this soft button to change the offset.

Standard Font

This feature is not currently available.

Clock Format

This selection indicates which combination of time and temperature information will be displayed.

- **Time** - displays time only.
- **Temp** - displays temperature only.
- **Time Temp** - displays time followed by temperature.
- **Temp Time** - displays temperature followed by time.

Time Format

This selection indicates the format for the time display.

- **12/24 Hour** - toggles between an 12 hour clock and a 24 hour clock.
- **Show Seconds** - toggles the seconds display on and off.

Temp Units

This selection indicates the units for the temperature display.

- **Show Decimal** - toggles the tenths of a degree indication on and off.
- **Show Degree** - toggles the degree symbol on and off.
- **C/F** - toggles between Centigrade and Fahrenheit.

Spacing

This selection allows the spacing of the font to be adjusted.

- **# Font Space** - adjusts the spacing between individual characters.
- **# T/T Space** - adjusts the spacing between the time and the temperature.

Font Origin

This selection allows the adjustment of the time and temperature characters relative to the origin.

- **# Origin X** - changes the X co-ordinate.
- **# Origin Y** - changes the Y co-ordinate.

TT Spacing

This selection allows the adjustment of the temperature spacing.

- **#Hor.spacing** - changes the Horizontal spacing.
- **#Ver.spacing** - changes the Vertical spacing.

TT Justify

This selection allows the time and temperature to be justified.

- **Left** - left justified
- **Relative** - justified relative to the logo size
- **Center** - center justified
- **Right** - right justified

Quick Selects

The following menu selections will only be available for a Quick Select logo.

Layer # Logo

Selecting Layer 1, 2, 3, or 4 will allow you to change the options for that layer.

- **#Logo** - use the keypad to enter the number of the logo required for the selected layer then select this soft button.
- **Select/Desel** - loads or unloads the logo on the selected layer from DDR memory.
- **Incl/Ignored** - includes or ignores the logo on the selected layer.
- **Goto Logo** - displays the logo information for the logo on the selected layer.

Text Crawl and Titling

The Text Crawl and Titling feature enables you to create a logo that consists of crawling or steady text. It can have different fonts, shares many properties with other logos, and occupies one of the layers. The text can consist of 1 to 12 independent sentences for Text Titling or an unlimited number of independent sentences for Text Crawl, though limited to 5000 characters total. Each sentence can have its own fonts, spacing, color, and origin.

Enabling the License Key

Note

You must have purchased this option to obtain a license key. One license key will enable all of the purchased options.

Before you enable the Text Crawl and Titling feature, make sure you have obtained an appropriate license key. You will need to provide the Customer Service representative with the serial number of your MGI-3903 module. (You can find out the serial number of your MGI-3903 by pressing **# Key** while in the **Extra Licenses** field. The number will be displayed on the IconLogo screen.)

At the IconLogo control panel:

1. Select **Eng**.
2. Press the **More** button to access additional choices.
3. Select **Extra Licenses**.
4. Press the **# Key** button.

Extra Licences
Machine Setup (cont.)
DDR Alarm 100 %
Disk Alarm 100 %
Sync Select Auto (Ref.) - OK
Capture Mode Field 2 Dominance
Capture Path /podisk/image
Extra Licences VB(-)Text(-)EAS(-)
EAS logos Disabled
EAS protocol CODI
Field Rate 59.9 Hz
HD Standard Auto (1080i)
Machine Status
Prog. In 1080i 59.94 Hz
Fill In Missing
Key In 1080i 59.94 Hz
Ref. In 1080i 59.94 Hz
SDI Audio Missing
AES Audio 1/2 3/4 5/6 7/8
LTC In Missing
DCF In Missing
MGI Type High Def.
DDR Capacity 22 % of 512.48 M
Sys. Memory 24 % of 56.66 M
Disk Space 10 % of 977.13 M
S/W Version V3.00hd7
Built On Oct 17 2005 @ 09:07:39
Fonts Loaded 1:Ok 2:Ok 3:Ok
#Key
More...

Figure B-20. Extra Licenses Menu

5. Enter the license key provided by your Customer Service representative.

   "The option is now active" message will display on the bottom left of the screen and (+) will show after Text in the Extra Licences parameter to indicate that the Text Crawl and Titling features have been enabled.

Configuring a Text Crawl or Text Titling

Note

For parameter details, see “Navigating the Logo Menu” on page 245.

At the IconLogo control panel, make these selections:

1. Select the **Logo** menu.
2. Press the **Create** button.
3. Press the **More** button.
4. Select the **Text Crawl** option.
5. Choose all appropriate items in the menu.
6. Enter **Name**.
7. Choose **Type of Storage**.
8. Choose **Automatic** or **Manual** loading.
9. Select the **Text** field. The Logo Text window will appear

   The Text menu consists of two windows: the initial entries window (see Figure B-21 on page 269) and the “End Action” entries window (see Figure B-22 on page 271).

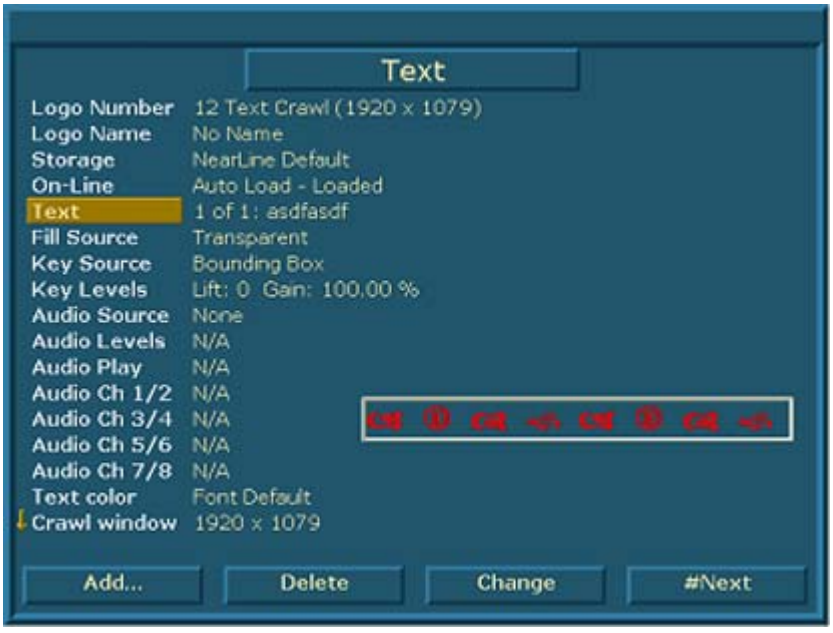


Figure B-21. Logo Text Menu (First Window)

Note

When you set font, text spacing, text color, and text origin, they will apply to the sentence you have added most recently; that is, to the one being currently displayed in the **Text** field. To set those parameters for other sentences, toggle between them by pressing the **Next** button while at the **Text** field.

10. Press **Add** and enter the actual text for the first sentence. (You can continue to add sentences by pressing **Add** again and entering additional text.)

    The visible IconLogo portion of the sentence is limited by 720 pixels (for the IconLogo preview monitor) or by 44 characters (for the control panel LCD screen. You can continue to enter text, but the characters will be "invisible" while in preview. Those characters will be entered in the next sentence. (If you have reached the sentence limit [30 for Crawl; 12 for Titling], all remaining text will be truncated.) If you want to see those "invisible" characters, press the **Enter** key at any time to go to the next sentence. The editor will try to split this long text into sentences on blank delimiting basis. However, when the text in the sentence is substituted; for example, by EAS message or by future manual editing, it will be truncated to the initial size of the sentence.

11. Set these items to the settings you want:
    - **Key Levels**
    - **Text Color** is set per each sentence. It will correspond to the one being currently displayed upon **Text** field. It can be set to the **Font Default**, or **Matte**. In latter case it will be necessary to set the color parameters such as Luma (luminance), Sat (saturation), and Hue.
    - **Crawl Window**[1] sets text window length and height in pixels. To define the text crawl window size:
      - Enter a numeric pixel value.
      - Choose one of these options:
      - Press **# Size H** to set this value for horizontal text window size.
    - **Position**[1] defines the start position (at the left side) of the text window in pixels. It can be set either manually or by using presets for Center, Left, Right, etc., of the screen.
      - To define the start position manually, enter a value and press **Pos X** or **Pos Y**, respectively.
      - To use a preset start position:, press **Presets**, press **Horizontal** or **Vertical**, and then choose the appropriate preset position. Alternatively, you can choose to use **File Default** position values after pressing **Presets**, if the file has an appropriate data associated with it.

[1] This item is not applicable to Text Titling logos.

Note

For horizontal position, “0” denotes the extreme right position on the screen, i.e. the text will start crawling from the very right edge to the left. A shift of the start position to the left assumes a negative value. For example, “–56” would represent start position in middle of the screen.

At this point, the Logo Text window will scroll down to display the “end action” entry fields (see Figure B-22).

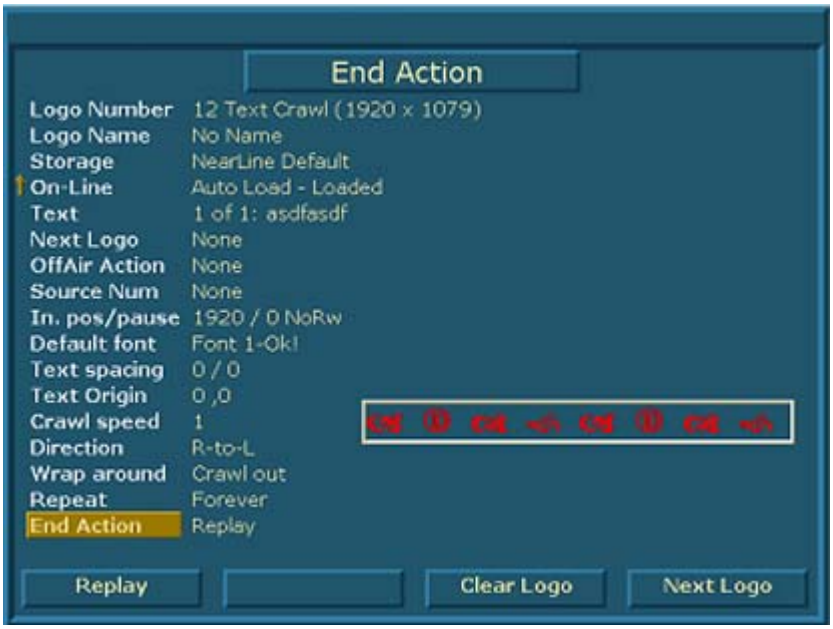


Figure B-22. Logo Text End Action Menu

12. The remaining item values are as follows:
    - **Opacity** sets the percent of the text opacity (100% = totally opaque; 0% = totally transparent).
    - **Fade Rates** (This parameter does not apply in the IconMaster configuration.)
    - **Next Logo** (This parameter does not apply in the IconMaster configuration.)
    - **Source Num** sets the source number to be displayed while the text is On Air. It can be set to a value of **None**.
    - **In. Pos/Pause** field defines the initial horizontal position of the text (when it begins to be displayed) in pixels and delay in frames between the beginning of On Air time for the logo and the crawl start. In the latter case, the text will be displayed as static immediately.
    - **Default Font** defines the font to be used for current sentence. It corresponds to the sentence being currently displayed in the **Text** field.

- Currently there are three preset fonts:
  - Font1 is Ariel Black — Font1 looks like this.
  - Font2 is Century Gothic — Font2 looks like this.
  - Font3 is Myriad — Font3 looks like this.

  These fonts can be overwritten with custom fonts created by using the Font Utility (see “Creating Fonts” on page 347).
- **Text Spacing** defines horizontal spacing between characters.
- **Text Origin** defines horizontal and vertical coordinates of the start of the sentence within the text window. Thus, coordinates “0, 0” denote the sentence displayed from the left side of the box (or right after the end of the previous sentence), centered vertically. It corresponds to the sentence being currently displayed upon **Text** field. By default, all of the sentences for Text Titling will appear one on top of the other, so that only the topmost sentence will be displayed. This parameter can be used to adjust the position of the sentences so they appear side-by-side, or above and below one another.
- **Crawl Speed**[1] sets the speed of text crawling in pixels per field.
- **Direction** can be set to **Right-to-Left** for normal crawling, or to **No Crawl** for static display of the text. In the latter case the text will be displayed starting from the first sentence in the appropriate position, and limited at the right side by the screen edge (or text window size, if smaller).
- **Wrap Around** sets the behavior of a crawl when the last sentence is being displayed.
- **Crawl Out**[1] means that the first character of the first sentence will be displayed only after the last character of the last sentence stops being displayed (i.e., “crosses” the left edge of the screen or the text window, if smaller).
- **Circular**[1] means that the first character of the first sentence is displayed right after the last character of the last sentence, i.e. sentences are crawling in continuous “chain” motion.
- **Repeat**[1] field defines how many times the entire crawl will repeat. It can also be set to **Wrap Forever**, which means the crawling will stop only upon removing the logo from On Air.
- **End Action**[1] defines what to do after the entire crawl has finished. It can be set to the following options:
  - **Replay** means the crawling will stop only upon removing the logo from On Air
  - **Clear Logo** displays an empty logo upon crawl termination
  - **Next Logo** displays another logo after the text finishes crawling; this logo will be the one set in the **Next Logo** field.

[1] This item is not applicable to Text Titling logos.

If set to **None**, the next logo will be the one that is currently **Next** for this layer (can be seen in the layer preview).

Modifying Text Crawl and Text Titling Parameters

All of the configuration parameters described can be changed while in use, from the **Logo** menu (see “Configuring a Text Crawl or Text Titling” on page 269).

Keep in mind that the font, text spacing, text color, and text origin parameters will apply to the sentence you have added most recently; that is, to the one being currently displayed in the **Text** field. To set those parameters for other sentences, toggle between them by pressing the **Next** button while in the **Text** field.

Adding and Deleting Sentences

You can add and delete sentences by pressing the **Add** or **Delete** buttons while in the **Text** field.

Modifying an Existing Sentence

1. Select the sentence within the **Text** field (by pressing **Next** button).
2. Press **Change**.
3. Edit the sentence.
4. Press **Enter** to finish the edit sequence.

Inserting a Logo into Text Crawl or Text Titling

A pre-defined logo can be inserted into a Text Crawl or Text Titling logo by using the '^' character. A different logo can be assigned to each of the three fonts. To define the logos see “Using the Font Utility” on page 346.

Logo Storage

Storage Types

Storage is a flat set of logos (i.e., a directory with files, but no subdirectories). Each logo must belong to one storage, but may belong to one on-line storage and one near-line storage at the same time. If a logo belongs only to on-line storage, it is considered a temporary logo.

IconLogo has two types of storage: on-line storage and near-line storage.

- On-line storage is the DDR. It is used for storing ready to play logos. It is volatile storage.
- Near-line storage is compact flash. It is used for permanent logos which are not loaded to the DDR. Logos can also be moved between different near-line storages or they can be deleted from them. The near-line storage ID becomes an attribute of the logo, which allows the grouping of logos with the same attribute. Up to 99 near-line storages can be created and used to classify logos.

CAUTION

Moving near-line logos from one storage to another does not physically move the logo file location.

Logos can be loaded from near-line to on-line either manually or automatically. Logos can be unloaded from On-line manually. This allows the optimization of on-line space.

Using Logo Storages

You can enter the logo storages by pressing the “File” menu button twice (in succession).

The following options are available within the Storage List menu:

- **Modify** allows you to change the current storage
  - **Edit** allows you to change the Description or Path of a selected storage (you will need to have a keyboard connected to change the description)

    For a description:
    - **Clear** clears the description
    - **...Cancel** cancels the changes and returns to the Edit menu
    - **...Enter** changes the description and returns to the Edit menu

  For a path (see “Navigating the File Menu” on page 275)
  - **Add** adds a new storage, to a maximum of 7 storages
  - **Delete** deletes the selected storage
  - **Exit** returns to the Storage List menu
- **Show Files** allows you to view the list of files in a particular storage (see “Navigating the File Menu” on page 275)
- **Logo Filter** allows you to view the logo list in the selected storage
  - **# Show** allows you to view the logo details. See “Navigating the Logo Menu” on page 245 for details.
  - **Load** loads the logo to the DDR memory
  - **Unload** unloads the logo from the DDR memory
  - **Storage** returns to the Storage List menu

Navigating the File Menu

You can enter the File Menu by selecting key and fill sources or the **File** menu button. Figure B-23 shows the File List menu displaying the files available at the selected directory.

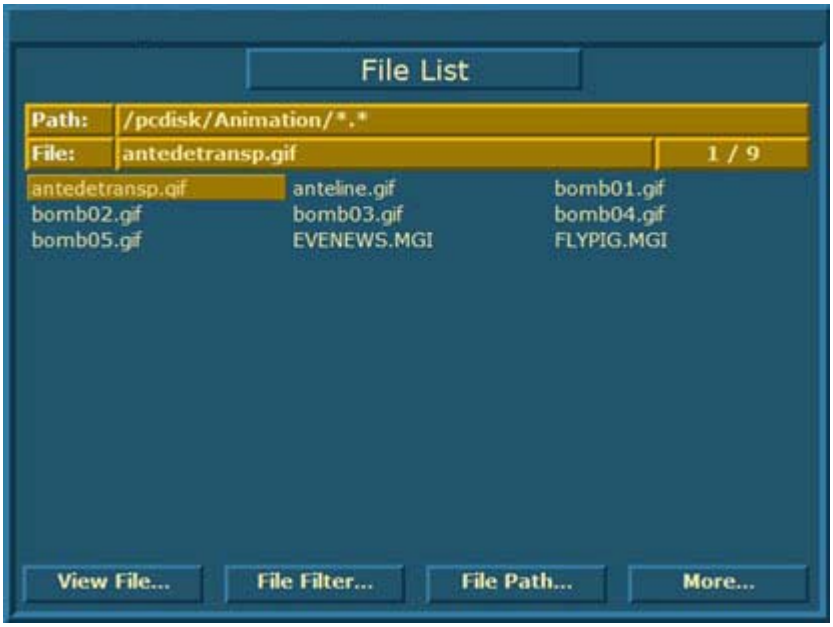


Figure B-23. File Menu

Note

When a blank compact flash is inserted into an MGI-3901 module, the required file structure and setup files are written to the compact flash; however, it will be a default setup. To copy the current setup, use **CFlash Clone**.

To navigate through the file list, use the top pot to move left and right, use the bottom pot to move up and down. Once a file has been selected, pressing down on either pot will display the same options as listed below in the soft buttons. Navigation through these options is the same as described above and performs the same functions as listed below.

The following options are available from the soft button options:

- **View File…** allows the selected file to be viewed and given the option of being selected as a logo or animation. The following options are available within the View File menu:
  - Select **# To Logo...** to set the file as a logo. See the Logo Menu section for further details.
  - Select **# To Key...** to set the file as a key. See the Logo Menu section for further details.

- Select **As Anim** to set the file as an animation. This option is not available in call cases. See the Logo Menu section for further details.
- Select **...Exit** to return to the main file list menu.

- **File Filter…** allows only graphic files of a certain type to be viewed. (Figure B-24 shows the selections available.) The following options are available within the Change File Filter menu:
  - **…Use** uses the filter selected and displays only files of this type in the file menu.
  - **…*.*** reverts to displaying files of all types.
  - **...*.mg2** displays files of mg2 type only
  - **...Exit** returns to the main File List menu..
- **File Path...** allows you to go to the **Change File Path** menu (see Figure B-24). The Change File Path menu will show the directory structure of the current file path.
  - Select "**/..**" followed by the **Select** soft button to take the file path up a level.
  - Select a directory (as in the example above) followed by the **Select** soft button to take the file path into that directory.
  - Press the **…Sel & Exit** button to view the files in the selected file path.

  New file paths can be created and old ones deleted from the Change File Path menu.

  To create a new path:

  1. Press the **Create Path...** soft button.
  2. Using the attached QWERTY keyboard, enter the new path name (no spaces).

  The path as entered can be seen highlighted in blue in the Current Path bar at the top of the menu.

  The entered text can be changed as follows:

  - Clear the entered text by pressing the **Clear** soft button.
  - Cancel the entered text, leaving no new path, by pressing the **...Cancel** soft button.
  - Use the entered text as the new path name by pressing **...Enter**.

  To delete a path:

  1. Select (highlight) the path in the menu using the soft pots.
  2. Press the **Delete Path...** soft button
  3. Press the **...Confirm** soft button.

  To cancel the deletion, press the **...Cancel** soft button.
- **More...**
  - **Delete...** deletes the selected file
  - **CFlash Clone** copies the system files of the current system onto a new compact flash card (this option does not allow you to copy Logo files).

- **CF Reload** reloads the logos from the compact flash into the MGI fast access logo memory in the same way as a system power-up. It is useful, for example, if the compact flash is changed for an alternative machine configuration.

- **Exit...** returns to the main File List menu.

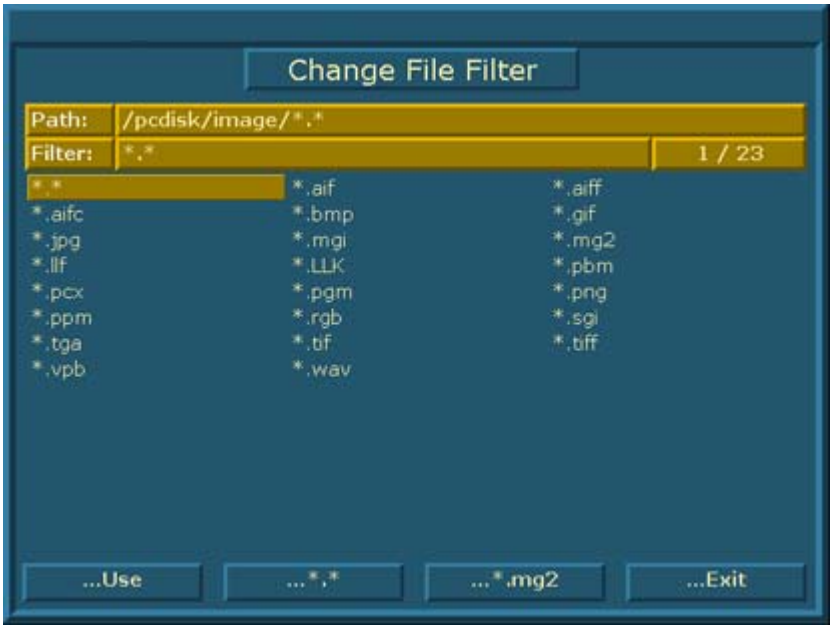


Figure B-24. Change File Filter

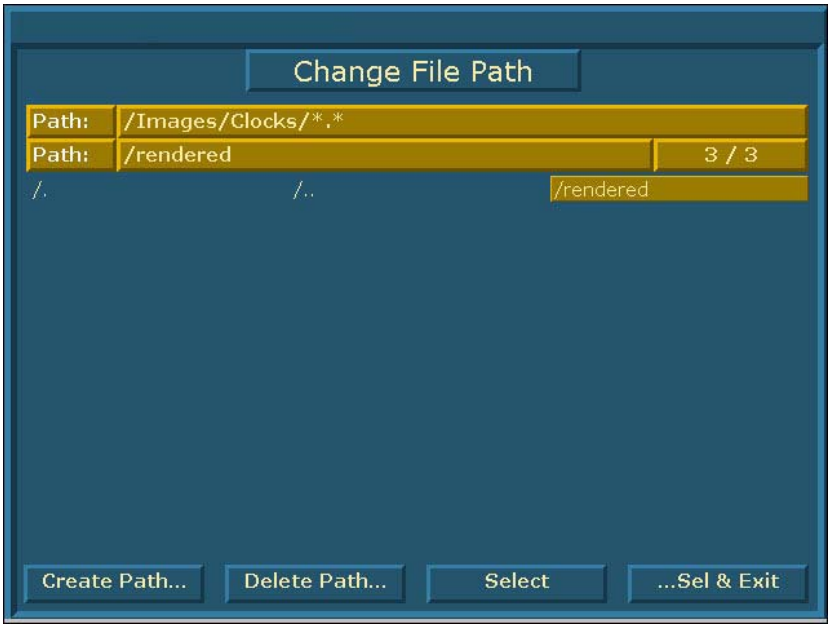


Figure B-25. Change File Path Menu

Navigating the Engineering Menu

The IconLogo Engineering menu consists of three main menu pages that are linked together through soft buttons and five sub-menu pages that are linked to items in the Set-up menu.

Quick access to all eight menu pages is available through the top soft pot button (see Figure B-26):

- Press the top soft pot button once and release. A menu selection window will appear.
- Scroll through the soft pot list to the selection you want.
- Press and release the top soft pot button again.
- The first item in the list will leave the menu page selection unchanged.

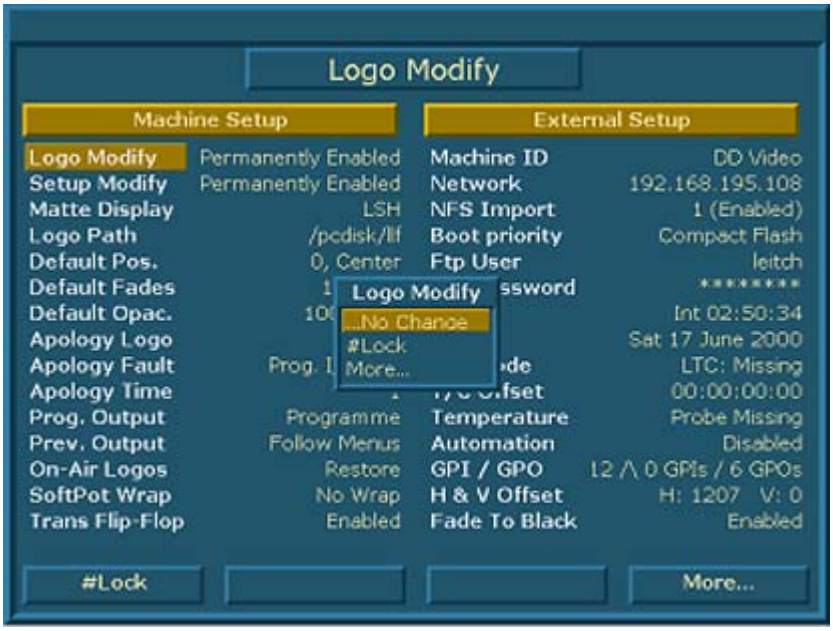


Figure B-26. Engineering Selection Menu

Set-Up Menu Page

The first Set-Up menu page provides the setup of the video I/O and the user-definable parameters of the control panel user interface (see Figure B-27).

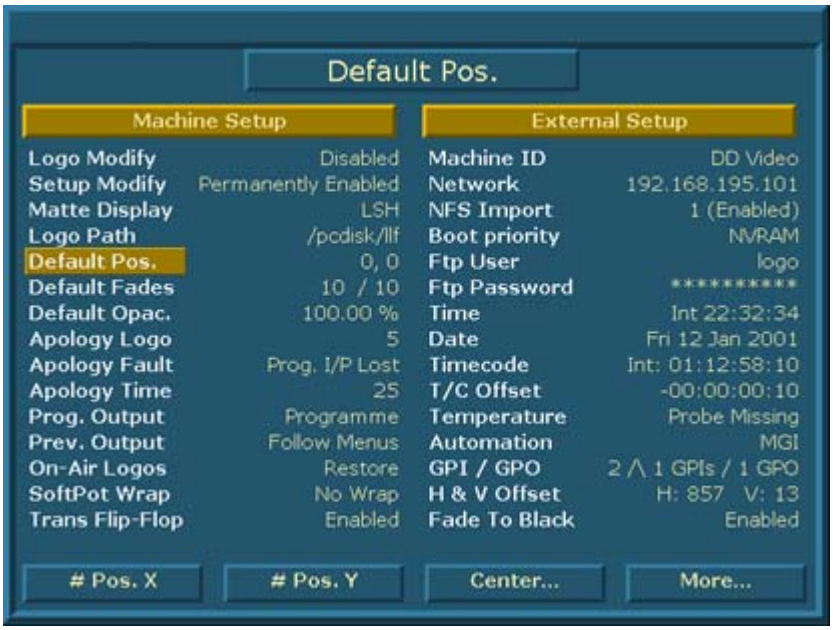


Figure B-27. Engineering Set-Up Menu Page

The parameters listed on this menu page are explained below.

Logo Modify

This parameter allows logos to be created and modified. It may be disabled so that only authorized users can alter or delete logos.

The logo creation side of the IconLogo control panel is lock-protected to protect logos from accidental modification or erasure.

To unlock and enable logo creation and modification:

1. Select the “Logo Modify” item using the top soft pot.
2. Enter the lock number (on new systems, the lock is 1234).
3. Press the **# Unlock** soft button.

To relock and disable logo creation and modification:

1. Select the “Logo Modify” item using the top soft pot.
2. Press the **Lock** soft button (does not require the lock number).

To change the lock number for the system:

1. Select the “Logo Modify” item using the top soft pot.
2. Enter a new lock number (between 1 and 6 digits).
3. Press the **#Change Key** soft button. The soft buttons will change, requiring you to enter it again.

4. Enter your new lock number again.
5. Press the **Change Lock** soft button again.

To permanently enable Logo Modify mode:

1. Select the “Logo Modify” item using the top soft pot.
2. Press the **Perm.Enable** soft button.

As a precaution, IconLogo automatically comes out of Logo Modification mode when the panel releases control of it.

Set-Up Modify

This parameter allows engineering set-up to be modified. It may be disabled so that only authorized users can change it.

To unlock and enable Engineering Set-Up modification:

1. Select the “Setup Modify” item using the top soft pot.
2. Enter the lock number (on new systems the lock number is 1234).
3. Press the **# Unlock** soft button

To relock and disable Engineering Modification:

1. Select the “Setup Modify” item using the top soft pot.
2. Press the **Lock** soft button (does not require the lock number).

Matte Display

The matte color internally generated by IconLogo (which can be used as a fill for logos or logo elements such as clock hands), can be viewed, entered, or modified in one of two color models:

- **Display RGB** (red, green, blue) – values all have the range 0-255
- **Display LSH** (luminance, saturation, hue) – hue value 0-359.99 degrees, the other values 0-100%

Logo Path

IconLogo loads graphics and audio files in their native formats. There is still a lot of detail required to define these files as logos, animations, and clocks. This detail is held in a file (one for each logo) in the directory shown by the path shown in the Logo Path parameter.

3. To change the path used for these files (for example, to a directory on an external NFS server which all IconLogo units in a network can share):

1. Press the **ChangePath** soft button or press the bottom soft pot. The path shown in the menu will be cleared.
2. Using a standard PC keyboard plugged into the control panel, enter the new path.
3. To finish, choose one of the following options:

- Press the **Enter** soft button
- Press the bottom soft pot

- Press the keyboard <**Enter**> key. If the new path cannot be found, the previous name will be reloaded.

During keyboard entry, the following operations are available:

- To clear the currently entered text, press the **Clear** soft button.
- To delete the last entered character, press the **<Del>** or **<Backspace>** key on the keyboard.
- To cancel the operation and revert the previous path, press the **Cancel** soft button.
- To stay in edit mode but enter the previous path as a starting point, press the **As Before** soft button.

When the logo path has been successfully changed, the logos in the system (including any on air (will not have changed. You can force the removal of all reference to the current logos including the Video/Audio memory they use, and load up the logos from the new path.

To clear the current logos, press the **Clear Logos...** soft button. Any logos on air will not be cleared.

To load logos from the new path:

1. Press the **ReloadLogos** soft button
2. Make one of the following choices:
   - Press the **...Reload All** to load new logos over the old logos (replacing all logos)
   - Press the **...Reload New** to load only logos whose numbers are not already used by the current loaded logos
   - Press **...Cancel** to return to the Logo Path menu.

As a security feature, none of the above operations will clear logos that are on air or on preview in any layer.

Default Pos.

Note

Using the centering feature will show **Centre** on both the Engineering set-up page and on the position parameter values for new logos on the Logo menu. The numerical values will not actually be calculated for centered logos until the logo size has been determined by loading in a fill or key source.

Some file formats contain position information (such as the previous LogoMotion MGI format). Where a logo is created from graphics files which contain valid position values, those values will be used instead of the defaults.

The position value of newly created logos is determined by the values set in this parameter. Each of the x and y values, can either be a numerical value (such as 0,0 – the top left hand corner of the active picture), or the screen centre. The first value denotes x – or the horizontal position and the second value denotes y – or the vertical position.

To change the default to a numerical value:

1. Enter the numerical value (positive values only).
2. Choose one of these options:
   - Press the **# Pos X** soft button for the horizontal default
   - Press the **# Pos Y** soft button for the vertical default.

To change the default to be center of active picture for new logos:

1. Press the **Centre…** soft button.
2. Press one of these soft buttons:
   - Press the **H only** soft button to have horizontal centering on new logos.
   - Press the **V only** soft button to have vertical centering on new logos.
   - Press the **Both** soft button to have both horizontal and vertical centering on new logos.

Default Fades[1]

Default Opacity

When a logo is first created, its opacity is set to the default value shown by this parameter.

To change the default opacity for all new logos:

1. Enter the new value (0% – 100%).
2. Press the **# Opacity** soft button.

Apology Logo[1]

Apology Fault[1]

Apology Time[1]

Prog. Output[1]

Prev. Output[1]

On-Air Logos

When IconLogo powers up, it loads up all the logos and engineering setup information from a combination of its compact flash card and any network file systems that it may use. In this way, all logos created and modified and all system settings are retained by the machine, regardless of how long it is switched off.

[1] This parameter does not apply in the IconMaster configuration.

For machines that are used almost continuously in a live situation, when there is a power outage the machine will reload all logos, and immediately put back on air those logos that had been on air when the power was lost.

To select this mode, press the **Restore** soft button.

Note

To minimize time-to-air from a power recycle, the logos which were last on-air are loaded from compact flash (or network) first. This is regardless of which Reboot option is selected.

In other situations (such as when a new system is brought on line with the compact flash settings copied from another machine), it would be advantageous to have the system load everything, but not immediately air the logos.

To select this mode, press the **Don't Restore** soft button.

Soft Pot Wrap

This parameter is a user preference, which wraps soft pot movement in all menus between the last and first parameters.

- To enable the wrap feature, press the **Wrap On** soft button.
- To disable the wrap feature, press the **Wrap Off** soft button.

Trans Flip-Flop[1]

Machine ID (and Panel Release)

The IconLogo control panel can control any IconLogo module on its network. To enable easy identification when selecting which machine to control, give each unit a unique name (for example, channel name).

To change the machine name:

1. Press the **Rename...** soft button or the bottom soft pot. The name shown in the menu will be cleared.
2. Using a standard PC keyboard plugged into the control panel, enter the new name.
3. To finish, choose one of these options:
   - Press the **...Enter** soft button
   - Press the bottom soft pot
   - Press the keyboard <**Enter**> key.

During keyboard entry, the following operations are available:

- To clear the currently entered text, press the **Clear** soft button.
- To delete the last entered character, press the <**Backspace**> key on the keyboard.

[1] This parameter does not apply in the IconMaster configuration.

- To cancel the renaming operation and revert the previous name, press the **...Cancel** soft button.
- To stay in edit mode but enter the previous name as a starting point, press the **As Before** soft button.
- To release control of the current machine, select the **Release...** soft button.
  - **...Cancel** cancels the action and returns to the previous selections.
  - **...Confirm** releases control of the current machine. The control panel no longer has control of the machine.
- To switch the temperature display for the this menu between Celsius and Fahrenheit, select the **Switch C/F** soft button.

Network

IconMaster uses an external 100Base-T Ethernet port on the rear connector module, for connection to the network for control panels and for network file systems (which can be used for NFS attached storage for graphics and logo files).

This network connection is entirely independent of the CCS network that operates through the resource module on the NEO frame. As such, the network detail needs to be set up for each IconMaster unit (even though in practice all IconMaster units will have identical settings except for their IP addresses).

Use the network selection of the Set-up menu for setting the following network details:

- **Machine IP address**
- **Host table** – to assign names to IP address for NFS servers used by the IconLogo unit
- **Routing table** – to assign routes from the network on which the IconMaster sits, to other network s through gateway machines (i.e., machines that have network connections on both the local and the remote networks)

Note

Performing this operation, if it changes the IP address of the machine, will inevitably release the machine from panel control (as the panel does not know about the change of address). Therefore, to regain control of the panel, the new IP address must be entered into the panel's list of “reachable” machines. See“Adding a Machine’s IP Address” on page 309 for details.

To set the IP Address:

1. Press the **IP Address…** soft button.
2. Enter the new IP address using the panel number pad (or external keyboard), using the colon character (“:”) in place of the dots in the IP address.

While changing the IP address, the soft buttons change to provide the following functions:

- Press the **As Before** soft button to recall the previous value. In this way you can just change the last value.
- Press the **Clear** soft button to clear the entered value and start again.
- Press the **...Cancel** soft button to cancel the whole operation and restore the previous value
- Press the **...Enter** soft button to end the operation and save the new IP Address of the machine. (Pressing the <**Enter**> key on the keyboard has the same effect.)

To access the Host table setup menu:

Press the **Hosts…** soft button. The menu will change to show the host table entries on the left and the routing table entries on the right.

- Press the **Add** soft button to add a new entry to the table.
- Press the **Delete** soft button to delete the selected table entry.
    - Press the **...Cancel** soft button to cancel the operation and start again.
    - Press the **...Confirm** soft button to delete the table entry.
- Use the soft pots to select each parameter in the new entry and press the **Modify…** soft button. Enter the machine name in the left column and enter the IP address of the entry in the right column.

While modifying entries, the soft buttons change to provide the following functions:

- Press the **As Before** soft button to recall the previous value. In this way you can just change the last value.
- Press the **Clear** soft button to clear the entered value and start again.
- Press the **...Cancel** soft button to cancel the whole operation and restore the previous value
- Press the **...Enter** soft button to end the operation and save the new value for the entry. (Pressing the **<Enter>** key on the keyboard has the same effect.)

To access the Routing table setup menu:

Press the **Routing…** soft button. The menu will change to show the host table entries on the left and the routing table entries on the right.

- Press the **Add** soft button to add a new entry to the table
- Press the **...Delete** soft button to delete the selected table entry.
    - Press the **...Cancel** soft button to cancel the operation and start again.
    - Press the **...Confirm** soft button to delete the table entry.

3. Use the soft pots to select each parameter in the new entry and press the **Modify…** soft button. Enter the name of the gateway machine in the right hand column and enter the IP address of the network to which it acts as gateway in the left hand column.

While modifying entries, the soft buttons change to provide the following functions:

- Press the **As Before** soft button to recall the previous value. In this way you can just change the last value.
- Press the **Clear** soft button to clear the entered value and start again.
- Press the **...Cancel** soft button to cancel the whole operation and restore the previous value
- Press the **...Enter** soft button to end the operation and save the new value for the entry. Pressing the <**Enter**> key on the keyboard has the same effect.
- Press the **...Confirm** soft button to end the operation and save the new value for the entry. Pressing the <**Enter**> key on the keyboard has the same effect.

Boot Priority

When the system is powered up, this selection indicates where the IP address is read from.

- Press **Compact Flash** to use the IP address from Compact Flash.
- Press **NVRAM** to use the IP address that was being used when the system was powered off.

FTP User

The file systems on both the compact flash and the software flash-stick (on which the system code and firmware resides), is accessible over the network through FTP. This allows new firmware/software to be transferred directly to the flash stick, or logo images to be FTP transferred directly onto the compact flash.

To override the default user for FTP transfer:

1. Press the **Change…** soft button.
2. Enter the new user name.
3. To finish, choose one of these options:
   - Press the **Enter** soft button
   - Press the **<Enter>** key on the keyboard.

While modifying entries, the soft buttons change to provide the following functions:

- Press the **As Before** soft button to recall the previous value.
- Press the **Clear** soft button to clear the entered value and start again.
- Press the**...Cancel** soft button to cancel the whole operation and restore the previous value.

FTP Password

To change the FTP password:

1. Press the **Change** soft button.
2. Enter the new FTP password.

3. To finish, choose one of these options:
   - Press the **Enter** soft button
   - Press the **<Enter>** key on the keyboard.

While modifying entries, the soft buttons change to provide the following functions:

- Press the **Clear** soft button to clear the entered value and start again.
- Press the **...Cancel** soft button to cancel the whole operation and restore the previous value.

Time

The IconLogo main board has a built-in, battery backed, real time clock. This clock is used as the time stamp for files created in the file system on the compact flash. It may also be used as a source of time for on-air clocks (if a time code source is not available).

To select the time code as the source of time for on-air clocks, press the **Timecode** soft button. The currently selected time code source will be used as the source for time (see “Timecode” on page 288).

To change the time source for on-air clocks to be the internal clock**,** press the **# Internal** soft button.

To alter the time on the internal clock:

1. Enter the time as hours; hours and minutes; or hours, minutes, and seconds (using the colon character “:” on the keypad as a delimiter).
2. Press the **# Internal** soft button.

Time entry precedence is as follows:

- If only one number is entered (e.g., 13), only the hour will be changed (so if the time shown was 11:34:02, the time will be changed to 13:34:02).
- If two numbers are entered delimited by a “:” character (e.g., 13:16), the hour and minute will be changed (so 11:34:02 will become 13:16:02).
- If three numbers are entered delimited by a “:” character (e.g., 16:16:09), the hour, minutes, and seconds will be set (so 11:34:02 will become 16:16:09).

Date

The IconLogo system date (for use with time-stamping the date on the file system) is maintained by the internal system clock.

To set the date:

1. Enter the day; or the day and month; or the day, month, and year (delimited by the “:” key).

Note

Do not enter more than two digits for the year; 20xx is assumed.

2. Press the **# Date** soft button.

Date entry precedence is as follows:

- Entering a single value (e.g., 5) will change the day only (so 4th July 2003, would become 5th July 2003).
- Entering two values (e.g., 5:6) will change the day and the month (so 4th July 2003 would become 5th June 2003).
- Entering three values (e.g., 5:6:4) will change the day, month, and year (so 4th July 2003 would become 5th June 2004).

Timecode

Note

Timecode value is updated on a control panel display once every five video frames, which may give the frame display the appearance of being jumpy (this is normal).

The system time code (which is intended as the source of the real-time on-air clocks), can be derived from one of three sources as follows:

- Press the **LTC** soft button to select the input LTC as the time code source.
- Press the **DCF** soft button to select the input DCF as the time code source.
- Press the **# Set Int.** soft button to select an internal time code counter as the time code source. This counter is reset to zero when IconMaster is powered up. It counts in frames, synchronous to the video reference supplied to the selected video reference input.

If using the internal time code source, to reset the time code to any valid time code value, follow these steps to enter a new value:

1. Enter the frames (FF); or seconds and frames (SS:FF); or minutes, seconds, and frames (MM:SS:FF); or hours, minutes, seconds, and frames (HH:MM:SS:FF), using the colon character (":") as the delimiter.
2. Press the **#Set Int** soft button.

Time code entry precedence is as follows:

- Entering a single valid value in the range (0-24 for 625-line or 0-29 for 525-line video) will change the entire time code value to 00:00:00:FF – where FF is the value entered.
- Entering two valid values, delimited by the ":" key, will change the seconds and frames of the time code.
- Entering three valid values, delimited by the ":" key will change the minutes, seconds and frames of the time code.
- Entering four valid values, delimited by the ":" key will change the hours, minutes, seconds and frames of the time code.

- Entering a single value larger than the permitted number of frames per seconds for the current video standard will result in the value being taken as frames and converted into time code (so, for example, in 525-line, a value of 203 will result in the time code being set to 00:00:06:23).

T/C Offset

Note

Whenever a non-zero offset is present, the time displayed on on-air clocks, will be offset from the input time code. Each individual clock, does however have its own offset, so that clocks for different time zones can be created and called up without having to alter the system parameters.

When an external time code source is used as the time source for on-air clocks, it is possible that the real time may be offset from the time required to be transmitted (it may for example pass through a large delay before being transmitted, or it may be transmitted to a different time zone). In such cases the time code offset parameter, allows the user to alter the time used between the on-air clocks in either advance (positive offset) or behind (negative offset), the input time code.

To enter an offset in advance of the time code (positive offset):

1. Enter the required time code (for setting internal time code, use the precedence rules as described above).
2. Press the **# TC OffSet** button.

Note

Press the “+/-” key to toggle the typed-in value between + and –.

To enter an offset behind the input time code (negative offset):

1. Enter the offset in advance of the time code (as described above).
2. Press the **Offset +/-** soft button to change its polarity.
3. Alternatively, enter the value preceded by the “+/-” key from the keypad, then press the **# TC OffSet** soft button.

Temperature

On-Air digital clocks may be displayed with or without a temperature value. This temperature value may be derived from an external probe (available as an option) or entered manually.

To select the temperature source:

1. Press the **Ext. Probe** soft button to select the external probe as the temperature source. (If this option is selected when the probe is not connected, the temperature will always show zero degrees centigrade 0°C or thirty-two degrees Fahrenheit 32°F.)

2. Press the **# Manual** soft button to select the manually entered temperature value.

To change the manually entered value:

1. Enter the value in centigrade (to the nearest 1/10th of a degree).
2. Press the **# Manual** soft button.

As practical locations for the temperature probe may produce a variation between the temperature read and the actual temperature, an offset (positive or negative) may be entered. The offset can be set to an accuracy level of 1/10th of a degree centigrade (even though the temperature shown on-air might only be shown to the nearest degree).

To enter the offset:

1. Enter the required offset (preceded by the +/- key for negative offsets).
2. Press the **# Probe Offset** soft button.

GPI/O

This parameter does not apply in the IconMaster configuration. GPI/Os should not be assigned in the IconMaster configuration.

H & V Offset

This parameter does not apply in the IconMaster configuration.

Fade-To-Black

Ensure this function is set to **Disable** in the IconMaster configuration.

Setup Menu (Cont.) Page

Further setup items and the machine's status are shown in this menu. To select this menu, press **More...** from the main Engineering Setup page. It displays the following parameters:

- More setup parameters
- Parameters that change as an indirect consequence of user action (such as percentage of disk space used)
- Parameters that may change without user interaction (such input status)

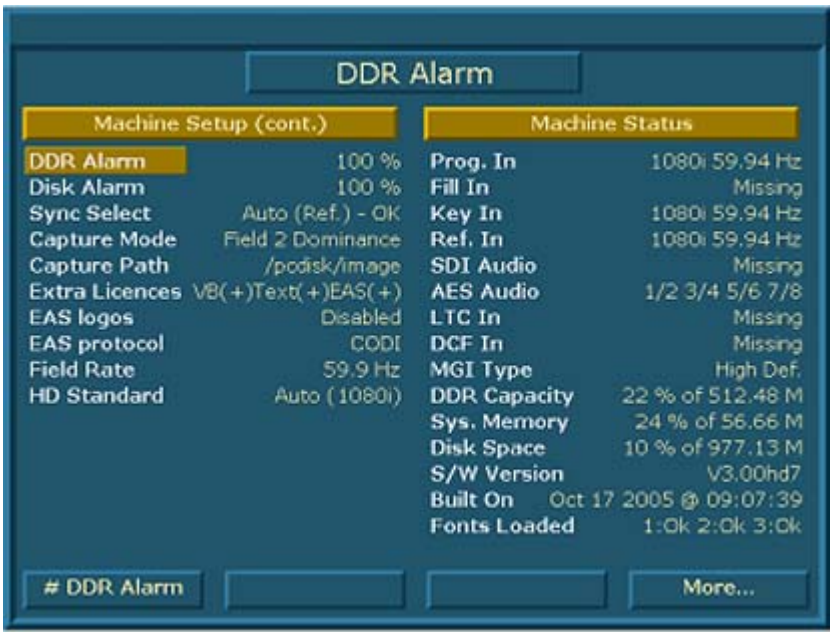

DDR Alarm
Machine Setup (cont.)
DDR Alarm 100 %
Disk Alarm 100 %
Sync Select Auto (Ref.) - OK
Capture Mode Field 2 Dominance
Capture Path /podisk/image
Extra Licences VB(+)Text(+)EAS(+)
EAS logos Disabled
EAS protocol CODI
Field Rate 59.9 Hz
HD Standard Auto (1080i)
Machine Status
Prog. In 1080i 59.94 Hz
Fill In Missing
Key In 1080i 59.94 Hz
Ref. In 1080i 59.94 Hz
SDI Audio Missing
AES Audio 1/2 3/4 5/6 7/8
LTC In Missing
DCF In Missing
MGI Type High Def.
DDR Capacity 22 % of 512.48 M
Sys. Memory 24 % of 56.66 M
Disk Space 10 % of 977.13 M
S/W Version V3.00hd7
Built On Oct 17 2005 @ 09:07:39
Fonts Loaded 1:Ok 2:Ok 3:Ok
DDR Alarm
More...

Figure B-28. Setup Menu (Cont.)

DDR Alarm

The DDR Alarm parameter allows you to set a CCS alarm when the available DDR memory usage exceeds a given threshold. This threshold is set as follows:

1. Enter the percentage (1% –100%) at or above which the alarm is to register.
2. Press the **# DDR Alarm** soft button.

You may clear this alarm only by increasing the threshold or by deleting logos to reduce the logo store usage.

Disk Alarm

The Disk Alarm parameter allows you to set a CCS alarm when the compact flash disk capacity exceeds a given threshold. This threshold is set as follows:

1. Enter the percentage (1% –100%) at or above which the alarm is to register.
2. Press the **# Disk Alarm** soft button.

Sync Select[1]

Capture Mode[1]

Capture Path[1]

VB Control[1]

VB Lines[1]

Instant Clocks[1]

The Instant Clocks parameter boosts the priority of up to 2 clocks to frequently used clocks. The clocks will be available to be put on air at any given time.

To set the clock logo number, enter the logo number on the keypad, and then press either the **# Logo 1** soft button or the **# Logo 2** soft button.

Extra Licenses

See “Select Disable EAS.” on page 298 for more information about this feature.

EAS Logos

See “EAS Logos Menu” on page 295 for more information about this feature.

EAS Protocol

See “EAS Logos Menu” on page 295 for more information about this feature.

VB Triggers[1]

Field Rate[1]

HD Standard[1]

[1] This parameter does not apply in the IconMaster configuration.

Machine Status Menu Page

The next setup menu page provides status information for various items.

Prog. In[1]

Fill In[1]

Key In[1]

Ref. In[1]

SDI Audio[1]

AES Audio[1]

LTC In

The LTC In parameter shows the status of the LTC time code input as **OK** or **Missing**.

DCF In

The DCF In parameter shows the status of the DCF time code input as **OK** or **Missing**.

MGI Type

The MGI Type parameter shows the signal type for the machine in use.

- **Std. Def.** – standard definition
- **Hi. Def**. – high definition
- **Analog[1]**

DDR Capacity

The DDR Capacity parameter shows the total available and the percentage usage of the video/audio store used for holding logos. A CCS alarm is available to flag when this parameter exceeds a user-preset threshold.

Sys. Memory

The Sys. Memory parameter shows the total available and the percentage usage of the processor memory.

Disk Space

The Disk Space parameter shows the size of the compact flash disk and percentage of it that has been used.

[1] This parameter does not apply in the IconMaster configuration.

S/W Version

The S/W Version parameter shows the version of the software installed on the machine.

Built On

The Built On parameter shows the date and time of the build for the machine's software and firmware.

Fonts Loaded

The Fonts Loaded parameter shows status of currently loaded fonts.

Audio Menu Page

The Audio menu page shows the audio setup for IconLogo. The MGI card can associate stereo audio to a logo and supply it to the IconMaster to be mixed with program audio. Any logo can have audio associated with it (see "Navigating the Logo Menu" on page 245). The logo audio is mixed with the program audio at levels you determined in the Logo Set-Up menu. Logo audio is normally derived from audio files (.WAV or .AIFF) and loaded into the system's DDR2 storage.

Figure B-29. Audio Menu Page

Channel 1…16

These menu items select, for each audio channel in the system, which channels will have which logo audio channel mixed over the top of them. They also allow channels to have no logo audio mixed over them.

These selections can be overridden by the settings for Audio Ch 1/2, 3/ 4, 5/6, 7/8 in the Logo Menu. (See page 256 for more information.)

For each pair of channels, choose one of the following selections:

- Choose **None** to pass audio through the system without mixing any logo audio onto it.
- Choose **Logo Left** to mix the left logo audio channel onto this audio channel
- Choose **Logo Right** to mix the right logo audio channel onto this audio channel

EAS Logos Menu

The EAS Logos menu allows you to prepare logos for EAS message insertion. An IconMaster can be connected directly to an EAS encoder/decoder or character generator, thus enabling you to insert emergency notification messages directly into the broadcast stream as a regular scrolling text crawl. An external EAS receiver is required to allow this feature to become operational. For details, please contact Customer Service.

Upon completion of these preparatory procedures, the EAS/IconMaster setup will operate automatically. See page 239 for more information about system operation.

Enabling the License Key

Note

You must have purchased this option to obtain a license key. One license key will enable all of the purchased options.

Before you enable the EAS communication feature, make sure you have obtained an appropriate license key. You will need to provide Customer Service representative with the serial number of your MGI-3903 module. (You can find out the serial number of your MGI module by pressing the **# Key** while in the **Extra Licenses** field. The number will be displayed on the IconLogo screen.) You will also need Text Crawl feature enabled (see “Text Crawl and Titling” on page 267).

Extra Licences
Machine Setup (cont.)
DDR Alarm 100 %
Disk Alarm 100 %
Sync Select Auto (Ref.) - OK
Capture Mode Field 2 Dominance
Capture Path /pcdisk/image
Extra Licences VB(+)Text(+)EAS(+)
EAS logos Disabled
EAS protocol CODI
Field Rate 59.9 Hz
HD Standard Auto (1080i)
Machine Status
Prog. In 1080i 59.94 Hz
Fill In Missing
Key In 1080i 59.94 Hz
Ref. In 1080i 59.94 Hz
SDI Audio Missing
AES Audio 1/2 3/4 5/6 7/8
LTC In Missing
DCF In Missing
MGI Type High Def.
DDR Capacity 22 % of 512.48 M
Sys. Memory 24 % of 56.66 M
Disk Space 10 % of 977.13 M
S/W Version V3.00hd7
Built On Oct 17 2005 @ 09:07:39
Fonts Loaded 1:Ok 2:Ok 3:Ok
#Key
More...

Figure B-30. Extra Licenses Menu

In the IconLogo control panel:

1. Select **Eng**.
2. Press the **More** button to access additional choices.
3. Select **Extra Licenses**.
4. Press the **# Key** button.
5. Enter the license key provided by your Customer Service representative.

   "The option is now active" message will display on the bottom left of the screen and (+) will show after EAS in the Extra Licences parameter to indicate that EAS has been enabled.

Configuring an MGI-3903 to Work with EAS Devices

1. Select **EAS Protocol**.
2. Choose the protocol used by your EAS device (TFT, Sage, or GR).
3. Select **EAS Logos**.

EAS logos
Machine Setup (cont.)
DDR Alarm 100 %
Disk Alarm 100 %
Sync Select Auto (Ref.) - OK
Capture Mode Field 2 Dominance
Capture Path /pcdisk/image
Extra Licences VB(+)Text(+)EAS(+)
EAS logos Disabled
EAS protocol CODI
Field Rate 59.9 Hz
HD Standard Auto (1080i)
Machine Status
Prog. In 1080i 59.94 Hz
Fill In Missing
Key In 1080i 59.94 Hz
Ref. In 1080i 59.94 Hz
SDI Audio Missing
AES Audio 1/2 3/4 5/6 7/8
LTC In Missing
DCF In Missing
MGI Type High Def.
DDR Capacity 22 % of 512.48 M
Sys. Memory 24 % of 56.66 M
Disk Space 10 % of 977.13 M
S/W Version V3.00hd7
Built On Oct 17 2005 @ 09:07:39
Fonts Loaded 1:Ok 2:Ok 3:Ok
EAS text logo
EAS QuickSelect
Disable EAS
More...

Figure B-31. EAS Logos Menu

Note

You can still choose logo numbers for Text and Quick Select, even if they are not configured yet, and configure them later. However, if you operate the EAS before these items are configured, an erroneous ON AIR output message will result.

4. Enter the logo numbers for **EAS Text** and **EAS Quick Select.** (**EAS Text** and **EAS Quick Select** are described on page 298.)
5. Alternatively, you can disable EAS by pressing the **Disable** button.

Preparing Logos for EAS Message Insertion

To insert EAS messages in the broadcast stream you must prepare a set of three logos: a text crawl, a Background logo, and a Quick Select logo.

- **Text crawl:** The text crawl is the actual text "box" into which EAS message will be inserted. Properties such as font type, position, etc., can be set according to your preferences. (See "Text Crawl and Titling" on page 267 for information on setting up a text crawl.)

  Beginning on page 271, a number of important text crawl parameters are listed. The **In. Pos/Pause** parameter should be set to **Rwnd** (always starts crawl at the beginning). **Wrap around** should be set to **Crawl Out**. **Repeat** should be set to **3** (stops the crawl after three iterations). The **End Action** selection should be **Take Next Logo** (when the crawl stops, the background is taken off as well).

  The EAS message text will be decoded by the IconLogo and inserted as the text of the assigned logo. If text has been manually entered into the Text Crawl, it will be overwritten by the decoded text.
- **Background logo:** The Background logo is the background layer for the displayed message (Optional).
- **Quick select logo:** The Quick select logo contains a macro that tells the IconLogo what to do when an EAS message arrives.

  Note

  A macro is series of commands and instructions that you group together as a single command to accomplish a task automatically.

  The macro specifies the text crawl and the background layer. It is recommended that you put the text crawl on layer 1, and the background logo on layer 2. Layers 3 and 4 are not required (see "Quick Selects" on page 267).

Make sure that the text crawl specified in Quick Select macro corresponds to the text crawl selected in the **EAS Logos** item of **Eng** menu.

Disabling EAS Messages

If you want to disable the EAS:

1. Select **Eng**.
2. Press the **More** button to access additional choices.
3. Select **EAS Protocol**.
4. Select **EAS Logos**.
5. Select **Disable EAS**.
6. For more information on configuring EAS in ICU, see page 184.

Appendix C

IconLogo Operation

Overview

This chapter describes how to operate IconLogo modules.

The following topics are found in this chapter:

- “IconLogo Operation Workflow” on page 300
- “IconLogo Control Panel Operation” on page 306
- “EAS Device/IconMaster System Operation” on page 317

IconLogo Operation Workflow

Logo Storage and Loading

Note

Harris recommends that you use different compact flash cards for each logo set, or that you use a larger compact flash card and separate directories created for each logo set.

At power-up, all previously-created logos are loaded from disk (local and/or network) into the large on-line graphics and audio stores on IconLogo's main board. These remain on-line and instantly accessible at all times. For more information about creating logos, see page 323.

Since IconLogo has such a large on-line store for both graphics and audio, 999 logo "slots" have been made available for instant recall.

If many large animations and full screen clocks are stored, there may not be enough room for 999 of them. System warnings and the status display in the Engineering menu give the user indications that the storage is nearing full capacity.

Each of these 999 logo slots can be one of five basic types:

- Static logos
- Animated logo (which may also be full-screen clips)
- Analog clock
- Digital clock (with or without temperature display)
- Quick select
- Text crawl and titling

CAUTION

On power up, the Key functions for Keys 3 to 6 are not available until all of the IconLogo logos have been loaded from the compact flash card to the online memory. Selecting a key during this time will have no effect. Once all logos have been loaded, the key functionality will return to normal operation.

Note

View access to the Logo menu is available at all times, but to modify or create a logo, the locking mechanism in the Engineering Menu needs to be disabled. For details, see "Navigating the File Menu" on page 275.

A Logo Definition File is created internally for each logo created. This file contains all the information about the logo (in a readable text format). Logo Definition Files are kept by default in the compact flash card in the */pcdisk/llf* directory. You can change location of these files from the Engineering menu on the control panel. In this way many different sets of up to 999 logos can be created and maintained for on-line access. You will not need to view or modify these files (and Harris recommends that they are only modified by IconLogo), but you should be aware of their existence to understand how the system works.

After you create a logo, the graphics files used to create it must be accessible to IconLogo during power-up and when any changes are made to it.

Logos may be altered from the Logo Menu at any time *except* when they are on air. This requires that the source of the graphics and audio files and the directory containing the Logo Definition Files (either compact flash card or network file system) must be available whenever changes are made.

Logo Storage and Transfer Options

Several different file storage options are available with the IconLogo IconMaster modules. These storage options include the following:

- Compact Flash
- LogoTransfer Utility
- File Transfer Protocol, or FTP

Compact Flash Storage

Note

While any compact flash card may be used for storage, Harris specifically recommends those manufactured by IBM, Fuji, Sandisk, and Lexar.

IconLogo's file system is contained on a removable compact flash card that is located in a socket on the front of the lower board in the IconLogo system. The file system on this card is compatible with the MS-DOS® operating system and, with the use of a compact flash PCMCIA adapter, files may be transferred directly on and off the card with a PC. This process can be performed safely when IconLogo is in operation because all data is read from the card when the machine is powered up. The only time the card is read after power-up is if new logos are created or others modified.

Note

See "IconLogo DDR Storage Capacity" in the *IconMaster Installation and Operation Manual* for information concerning the storage capacities of various DDR modules that can be used with the IconLogo.

The card must always be in place when the machine is powered up.

This system, while perfectly adequate for installations where logos are not frequently updated, will not suit busier systems where logos may be required to change daily or even be updated during programs. For this reason, the file system on the compact flash card is networked.

Networking the file system provides the user with several options for transferring files on and off the compact flash card and even provides the opportunity to have many IconLogo units sharing the same graphics files and logos. The various options are described in this appendix for users who wish to take advantage of the flexibility the networked system offers.

LogoTransfer Utility

Note

LogoCreator software allows for conversion of image files to an MG2 format file. (See page 235 for details.)

This Windows plug-in allows for IconLogo systems to be represented as folders. The contents of this folder are the logs currently on the system. Transfer occurs with common file drag and drop functionality. Combined with the LogoCreator software, logo file transfer times are improved significantly.

File Transfer Protocol (FTP)

The IconLogo system supports standard File Transfer Protocol, or FTP. This uses an FTP application on a host computer (Microsoft Windows operating systems, MS-DOS, or UNIX) to transfer files directly onto the compact flash from the host computer. In this way, your system will still have all logos and graphics files stored on the compact flash, but allows faster and remote file transfer using a standard 100Base-T network.

CAUTION

You should change the user name and password from the defaults after the system has been installed, as the system provides no other protection from files being overwritten or deleted using FTP.

The FTP protocol requires the operator to have a user name and password for the remote system (in this case IconLogo). IconLogo has a default user name and password but these may be changed from the Engineering menu.

The case-sensitive defaults are as follows:

- **User Name**: leitch
- **Password**: LeitchAdmin

The following example shows how to FTP files onto the IconLogo compact flash by using an MS-DOS window.

1. At a DOS prompt, start FTP on your PC from the directory the required logo image files are stored.

2. Type the following FTP command (where **LogoMachine** is the IP address of the IconLogo; for example 192.168.117.82):

   > ftp 192.168.117.82

3. Enter a user name and password when prompted. (You can change these from the Engineering menu.) The defaults are user name **leitch**, password **LeitchAdmin**.
4. Move ftp into the directory you want your images (image directory of the compact flash is best):

   > cd /pcdisk/image

5. Put into binary mode:

   > bin

6. Turn hash printing on:

   > hash

7. Transfer a file:

   > put myImage.bmp

8. Continue until all images are transferred.
9. To end the session, type

   > quit

At any stage you can change the local directory (where the images come from on your machine) by typing this command:

> cd C:/otherdir/animations

Other commands which may be useful are shown in Table C-1.

Table C-1. Additional FTP Commands

Command	Meaning
> is	Gives a list of subdirectories and files in the current directory
> mput	allows you to copy multiple files from the local machine to the remote machine (you will be prompted for a y/n answer before transferring each file
> delete	Allows you to delete a file
> help	Allows you to request a list of all available FTP commands (e.g., **help is** would give specific help on the dir command)

System Setup for Local Logo Creation Using Graphics and .Wav Files on a Remote Server

Note

You will need an external keyboard to carry out these operations.

1. Go to the Engineering Set-Up menu.
2. Use the soft pots to highlight **Network**.
3. Press the **Hosts** soft key.

4. At the Hosts menu:
   a. Press **Add**.
   b. Scroll to Machine Name.
   c. Press **Modify**.
   d. Enter the remote machine name from the keyboard (which, in this example, we will label NFS_server).
   e. Press **Enter**.
5. Perform the same steps for the IP address of the remote machine.
6. Exit from this menu by pressing the **..Exit** soft button.
7. Create an empty directory (mount point); for example, /pcdisk/MyFolder.
8. Press **File**.
9. Press **File Path** (use **\..** + **Select**, if necessary, to navigate to the /pcdisk/*.* directory).
10. Press **CreatePath**.
11. Using an external keyboard attached to the control panel, type **MyFolder**.

Note

When using an exported repository for logo definition files, the servers NFS setup must allow Read and Write access to the exported path. (The default is usually **Read Only**).

12. Use the soft pots to highlight **NFS Import**.
13. At the Setup menu:
   a. Press **Add**.
   b. Scroll to Machine Name.
   c. Press **Modify**.
   d. Enter the remote machine name from the keyboard.
   e. Press **Enter**.
14. Perform the same steps for the exported path on the remote server and the local path.
15. By selecting the /pcdisk/MyFolder/*.* path, you will see the files in the corresponding directory of your PC.
16. Exit from this menu by pressing the **..Exit** soft button.
17. Go to the **File** menu.
18. Press the **FilePath** soft key, then navigate to the top of the file structure.

19. The new export path will appear. You will now have access to all the image and/or audio files on your remote server.

CAUTION

The NFS server PC should be running all the time. Logos will not disappear if the network connection terminates but, IconLogo may not be able to load logos.

The speed and power of this setup will become apparent as changes made to the graphics file on the remote server can be imported to the MGI and cut to air in seconds.

System Setup for Accessing Audio/Video Logos Created on a Remote Server

Note

You will need an external keyboard to carry out these operations.

1. Go to the Engineering Set-Up menu.
2. Use the soft pots to highlight **Logo Path**. This will most likely be set to /pcdisk/llf, which is the default setting for the local compact flash file system.
3. Press the **ChangePath** soft key; then, using the external keyboard, enter the local path (for example, /extlogos).

Note

The path can only be changed to a valid local or remote exported directory and should have write access.

4. Press the **ReloadLogos...** soft key, and then press the **...Reload All** soft key.

Once the reloading operation is complete, all the logos created on the remote server are available for use. (See “Logo Path” on page 280 for additional information**.**

IconLogo Control Panel Operation

Note

You may also use a Harris NUCLEUS™ control panel (with the IconLogo control option) for manual on-air control of the system as well as for other off-line functions. See the *NUCLEUS IconLogoControl Option Installation and Operation Manual* for details.

The IconLogo control panel is used for manual on-air control of the system as well as for off-line functions, such as system set up and the creation of logos.

The panel can be configured to control one and slave another of any number of IconLogo units over the 100Base-T network. Any IconLogo available on the network may be grabbed by the panel for manual control or set up and then released when no longer required.

The panel shown in Figure C-1 has dedicated on-air control buttons and a number pad for selecting logos, previewing and taking them to air and for controlling animation playback. The 4-in. (10.16-cm) high resolution LCD display shows logo preview and system on-air status during manual on-air operation. Optionally, you can use the SVGA output on the rear of the panel ports the LCD display to a separate monitor.

Figure C-1. Remote Control Panel (Front)

The display, together with four soft buttons and two soft pots, provide IconLogo with a menu system that is powerful, yet easy to operate. See “Soft Buttons” on page 245 for more information on how the soft pots and buttons work.

The five basic menus can be selected with the five menu buttons displayed on the left side of the panel. The five menus are as follows:

- **On-Air** – This menu selection provides feedback during live operation as to which logos are on air on each layer and which logos are cued to go on air next. It also provides previewing on the panel display of the logos on-air and next on the current layer.

- **Preview** – This menu selection allows you to manually browse through the available on-line logos, viewing each one on the panel display together with all relevant information such as title, size, opacity, position, etc.
- **Logo** – This menu selection allows you to create, set up, and manage all logos. It also works interactively with the **File** menu for locating and browsing source files for the logos.
- **File** – This menu selection provides a file and directory view of all file systems available to IconLogo, both locally on the compact flash disk and across the network. It also allows file viewing and fast creation of logos.
- **Eng** – (Engineering or system menu) This menu selection provides the set up for the entire system, including networking, and a status screen for locating problems in the system (such as loss of input or control signal).

Some menus require keyboard entry, so a standard PS2 keyboard socket is available on the rear of the panel. A keyboard is required for network configuration, renaming logos, and text crawl and titling logos. Normal operation does not require the keyboard to be connected to the panel.

A 15-pin SVGA output is also available on the panel to show the control panel LCD display on an external monitor. The panel's 4–in. (10.16 cm) LCD display provides enough resolution and detail for normal operation, but during logo set up, a larger display may be preferred.

The numeric keypad has the following special function keys:

- **TC** – This special function key displays the time code entry in either frames or seconds.
- **CLR** – This special function key clears the entry.
- **SEL** – This special function key displays the selected logo on the preview output.
- ←**Backspace** – This special function key deletes the last keystroke.

Setting Up the Control Panel

The IconLogo control panel is capable of controlling one and slaving another of any number of IconLogo systems on the same network . The display on the control panel as first powered up is shown in page 308.

Since the control panel is part of a networked system, the control panel, when first powered up, will not be able to talk to your IconLogo. You must define the IP address of the IconLogo “machine(s)” you want it to control.

Figure C-2. Display on New Panel

Adding a Machine's IP Address

Note

In the menu descriptions that follow, "machine" refers to a IconLogo card set.

Use the number pad to enter the IP address of the IconLogo machine you want to talk to. Use the colon button to punctuate the address where you would enter a dot. The number pad value will be displayed in the top right hand corner of the display (see Figure C-3). After entering the IP Address, press the **Add** soft button.

Figure C-3. Entering an IP Address

For example, to add the IP Address 192.168.117.73, press

1 9 2 : 1 6 8 : 1 1 7 : 7 3 [**Add**]

The display will then show the new machine and any previously entered machines (see Figure C-4 on page 310).

Selecting a Machine

For each machine, its name (if entered through keyboard) is shown together with its current network status as follows:

- **Available** – the machine is available for control
- **Unreachable** – the machine cannot be reached (either not powered up or there is a network connection problem)
- **Busy** – the machine is being controlled by another panel

Figure C-4. Machine Selection

To select a machine, use the top soft pot to scroll to and highlight a machine, then press the **Select** soft button.

If the machine is available it will display the On-Air Menu (see Figure C-5). If there are any logos on preview or on-air for the selected layer, they will be shown in place of the “None” logos.

Figure C-5. On Air Menu

Removing a Machine From the Network

When a machine will no longer be used in the network, or needs its IP Address changed, you must remove the old IP Address: select the machine with the top soft pot, then press the **Remove…** soft button. A new soft button selection will appear, which will allow you to cancel or confirm the machine's removal from the network list (see Figure C-6).

Figure C-6. Removing a Machine from Panel

Configuring a New System

CAUTION

Harris recommends that a dedicated network be used for IconLogo systems, control panels, and any file servers they use for source logos. Harris also recommends using a router to connect to other networks where the source material for the logos is generated to keep IconLogo network traffic down and to optimize system performance.

The default IP address of a new IconLogo system is 192.168.117.88. You can change the default IP address after you have the control panel "talking" to it.

To configure a new system:

1. Isolate the network between the panel and IconLogo, or use a single crossed Ethernet cable between the IconLogo boards and the panel.
2. Add the IP Address 192.168.117.88 to the control panel list as described on page 309.
3. Press the **Select** soft button to select the machine.

4. Change the IP address of the machine (for more detail on how to do this, see “Adding a Machine’s IP Address” on page 309).
5. Cycle the power on the IconLogo system in the NEO frame.

Note

IconLogo and its control panel are designed to operate on a single subnet. Operation across subnets is not explicitly supported.

6. Add your machine’s new IP address to the panel machine list as described above.
7. Select the machine. You should now be able to introduce the machine to your network.
8. Remove the default IP address from the control panel machine list before putting the control panel back on the network.

Disconnecting the Control Panel

To disconnect the remote control panel:

1. Press the **Engineering** menu.
2. Select the “Machine ID” item using the soft pot.
3. Select the **Release** soft button.
4. Select the **Confirm** soft button

   OR

   Double press the **Eng** button.

Changing the IP Address of the Control Panel

To change the IP address of the MGI-RCP-XX, you must connect a PS2 keyboard and mouse to the control panel, using the “Y” lead adaptor supplied with the keyboard.

1. Type Ctrl X to exit the MGI application.
2. From the Windows taskbar, select **Start>Settings>Control Panel**.
3. Select the **Network** icon.
4. Select the **TCP/IP Realtek RTL8139/810X Family PCI Fast Ethernet NIC** entry.
5. Click the **Properties** button.
6. Select the **IP Address** tab.
7. Select the **Specify an IP address** radio button.
8. Enter the required IP address and subnet mask.
9. Click **OK**, and then click **OK** again.

   You will then be prompted to restart your control panel for the changes to be accepted.

On-Air Operation

Layer Selection

IconLogo has four on-air layers, each of which can put any of the available logos on-air. Up to 999 logo slots are available for building logos; each of these may be either static, animated or clock logos. The clocks can be either analog or digital, and the digital clocks can be shown with or without temperature. There are no limitations on which logos can be put onto which layers. It is possible, therefore, to put four clocks on air, each with a different style and showing a different time.

Layer Priorities

Layers are prioritized such that layer 1 has the highest priority and layer 4 has the lowest priority. Layers are taken to air using the IconMaster keyers; Layer 1 is taken to air using Key 3, Layer 2 is taken to air using Key 4, Layer 3 is taken to air using Key 5, and Layer 4 is taken to air using Key 6.

The layer prioritization only matters where logos on different layers overlap on air. However, the prioritization of layers can be used to produce composite effects, which appear to be single logo.

For example, an analog clock, which appears to have an animated face that moves every quarter of an hour, could be constructed from a normal analog clock which has a face logo with zero key values. The face animation would then be placed on the layer below, centered exactly where the original clock face would have been. The clock hands would then operate as normal and be displayed over an invisible face, which would reveal the animated face on the layer below.

Priorities of the layers are fixed. However, from the On-Air menu you can swap layers, so that logos on preview and program together with all settings for the layer are swapped with another.

To swap layers:

1. Select one of the layers you wish to swap using the Layer Select buttons.
2. From the On-Air Menu press the **Swap Layer…** soft button.
3. Select the layer you wish to swap with using the soft keys which show the other layers.

The current layer selection will change to the layer you swapped with, so that the logo selection remains the same.

Multiple Layer Operations

While under manual control, all on-air operations on IconLogo apply to the layer currently selected on the control panel. To select the required layer, simply press one of the layer select buttons. The currently selected layer’s button will illuminate.

The On-Air Menu

In the On-Air menu, the current layer's preview and program logos are shown, together with information about the logos' size, position, and type. A typical On-Air menu is shown in Figure C-7.

Figure C-7. Typical On-Air Menu

Numerical Logo Selection

To put a logo on-air, either the required logo number must be known or you must look for the required logo in the menu system. The following section describes all the available methods for putting logos on air from the control panel when you know the logo number.

Selecting a Transition Type

Transition types displayed on the IconLogo soft panel do not apply. Transition types follow the selection mode on the IconMaster control panel.

Logo Sequences

This parameter does not apply in the IconMaster configuration.

Finding a Logo Using the Preview Menu

The previous section concentrated on selecting logos when you already knew the logo number. When you do not know a logo's number, the **Preview** menu is the fastest way to locate it. From this menu, once the logo has been found it can be selected onto the Preview for taking to air with a single button press. Figure C-8 shows a typical layer menu that displays the details of Logo 22.

Figure C-8. Typical Preview Menu

To find the required logo:

1. Press the **Preview Menu** button.
2. Scroll through the available logos. The logos will appear on the menu together with details of the type, name, size, position, and opacity on screen.
3. A high-resolution thumbnail of the logo appears in the menu (although not updating as fast as the logo details).
4. If the “Follow Menus” option is set in the Engineering menu, the Preview output will show the currently selected logo as it changes in the Preview menu.

Once the required logo has been found, to select the logo to a layer:

1. Press the **Sel** button on the number pad. It will then appear on the current layer’s, preview and program selection as shown on the On-Air menu, which will be automatically selected.
2. Press the **TAKE** button on the IconMaster control panel to put the logo on air.

Selecting a Logo from the Logo Menu

When a logo has just been created or modified, in certain situations it may be desirable to take this logo directly to a layer. To do this, the logo selection works the same way as described in the previous section for the Preview menu.

When the panel is in the Logo menu and the Logo menu shows the logo that is required on air:

1. Press the **Sel** button on the number pad. It will then appear on the current layer’s Preview selection as shown on the On-Air menu (which will be automatically selected).

2. Press the **TAKE** or **CUT** buttons on the IconMaster control panel.

EAS Device/IconMaster System Operation

Upon completion of the preparatory procedures described in “EAS Logos Menu” on page 295**,** the combined EAS device/IconMaster system will operate automatically. When an EAS message is received, it will be put on the selected layers immediately with the appropriate background, other logos, etc., as per the settings you selected. The length of time the EAS message will stay on the layers is determined by the **Text Crawl Repeat** parameter (see page 237).

If another EAS message arrives, it will be put on the layers immediately, regardless if the previous message was already taken out or not.

To air an EAS message, the appropriate keyers must be enabled on the IconMaster with no logo selections made. In this mode of operation, the keyers are on-air, but do not contribute any content, no logo selected. When an EAS message is received, it will be instantaneously put to air and on completion, the no logo selection is restored.

Appendix D

IconLogo SoftPanel Software Application

Overview

This chapter describes how to install and operate the IconLogo SoftPanel software application.

The following topics are found in this chapter:

- “Installing the Software” on page 320
- “Removing IconLogo SoftPanel” on page 322
- “Control Panel Operation” on page 322

Installing the Software

The IconLogo Soft Panel software application has the same functionality as the hardware control panel. Using the soft panel, you can control the IconLogo through an external terminal that can be located away from the IconLogo system.

You must install certain required hardware and software before you can install and operate the IconLogo software. See page 325 for details. Once those requirements are met, follow these steps:

1. If an existing version of IconLogo is installed on the PC, uninstall it, and then restart the PC.
2. Close all other applications running on the PC and insert the Installation CD into the PC CD-ROM drive.
3. Double click **Setup.exe** if the setup does not start automatically
4. When the **Welcome** box appears, click **Next**.
5. When the **Warning**! box appears, click **Next**.
6. When the Microsoft.NET framework box appears, follow the instructions, and then click **Next**.
7. When the **Select Features** box appears, click the + symbol from the complete file list on the left side of the window (see Figure D-1).

   This displays all of the software that can be installed. The default is to install all of the software.

   To deselect a specific software option, click the arrow to the left of the option and then select **X** from the menu (see Figure D-2).

   To change the default installation locations, click the **Browse** button and then follow the instructions.

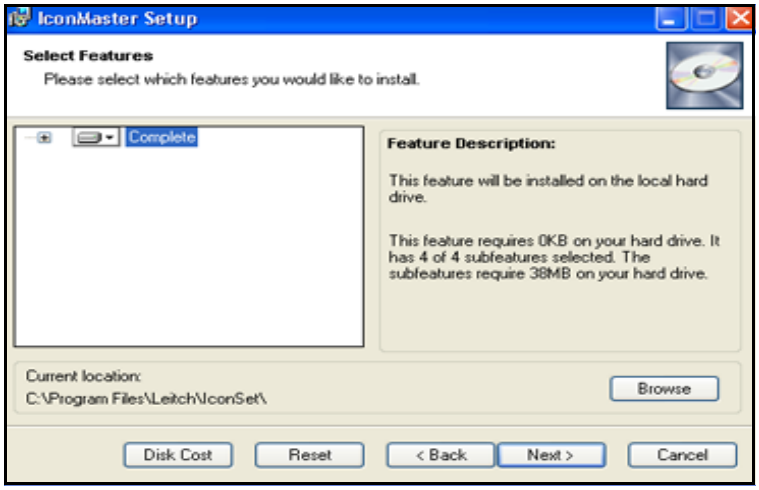

IconMaster Setup
Select Features
Please select which features you would like to install.
Complete
Feature Description:
This feature will be installed on the local hard drive.
This feature requires 0KB on your hard drive. It has 4 of 4 subfeatures selected. The subfeatures require 38MB on your hard drive.
Current location:
C:\Program Files\Leitch\IconSet\
Browse
Disk Cost
Reset
< Back
Next >
Cancel

Figure D-1. Select Features Box

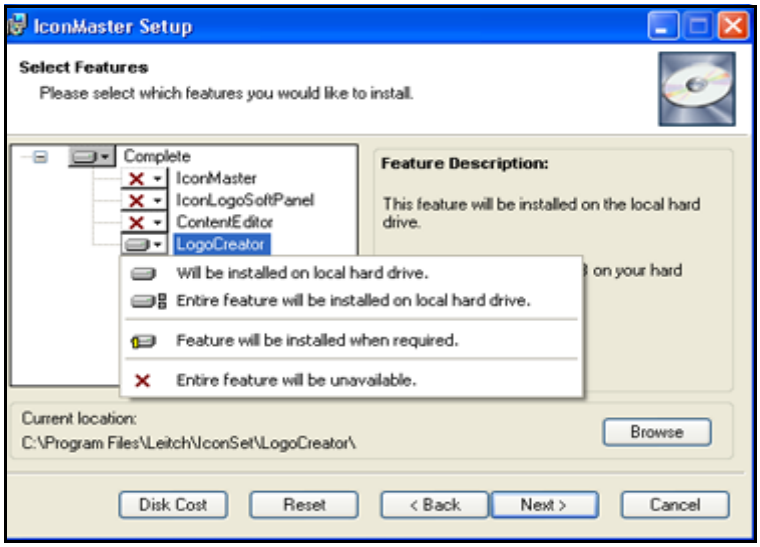


Figure D-2. Selecting or Deselecting a Feature

8. Click **Next** to continue, and then click **Next** to start the installation.
9. Click **Finish** when the **Setup Complete** box appears.
10. Restart the computer.

Removing IconLogo SoftPanel

1. Go to the Windows Control Panel (**Start>Settings>Control Panel**), and then select **Add/Remove Programs**.
2. Select **IconSet** from the list and follow the instructions provided on screen.

CAUTION

If you remove IconSet, you will also remove LogoCreator, Content Editor, and the IconMaster configuration utility.

Control Panel Operation

The IconLogo Control Panel GUI has the same layout and functionality as the hardware control panel, but uses a terminal keyboard and mouse instead of pots and soft buttons. (See Figure D-3 on page 322.)

To select a soft button, left click on the mouse from the terminal.

To navigate through the menus, use the arrow keys on the keyboard or hold down the left mouse button and scroll through the menu list with the mouse.

Figure D-3. IconLogo Control Panel GUI

Appendix E

LogoCreator Software Application

Overview

LogoCreator is a Windows-based software application that allows you to create, view, and edit MG2 logo files, which are recognized by your IconLogo hardware. LogoCreator saves all position and image information in the MG2 file. Use LogoCreator to create and save static and animated logos.

LogoCreator also includes a Logo Transfer plug-in option that allows you to access your IconLogo system from your PC. When you install the Logo Transfer plug-in, you can view and transfer logos using a device window on your computer.

The following topics are covered in this chapter:

- "Configuring a PC for Best Display" on page 324
- "Setting Up LogoCreator" on page 325
- "Creating MG2 Logos" on page 326
- "Working in LogoCreator" on page 334
- "Connecting to an IconLogo System" on page 339

Configuring a PC for Best Display

For LogoCreator software to show clearly and appropriately on a PC monitor, set the **Display Properties** for the monitor to 1024×768 resolution.

To configure a PC monitor for best display of LogoCreator software, complete these steps:

1. Click **Start**, point to **Settings**, and click **Control Panel**. This opens the Control Panel.
2. Double-click the **Display** icon to show the **Display Properties** box.
3. Select the **Settings** tab.

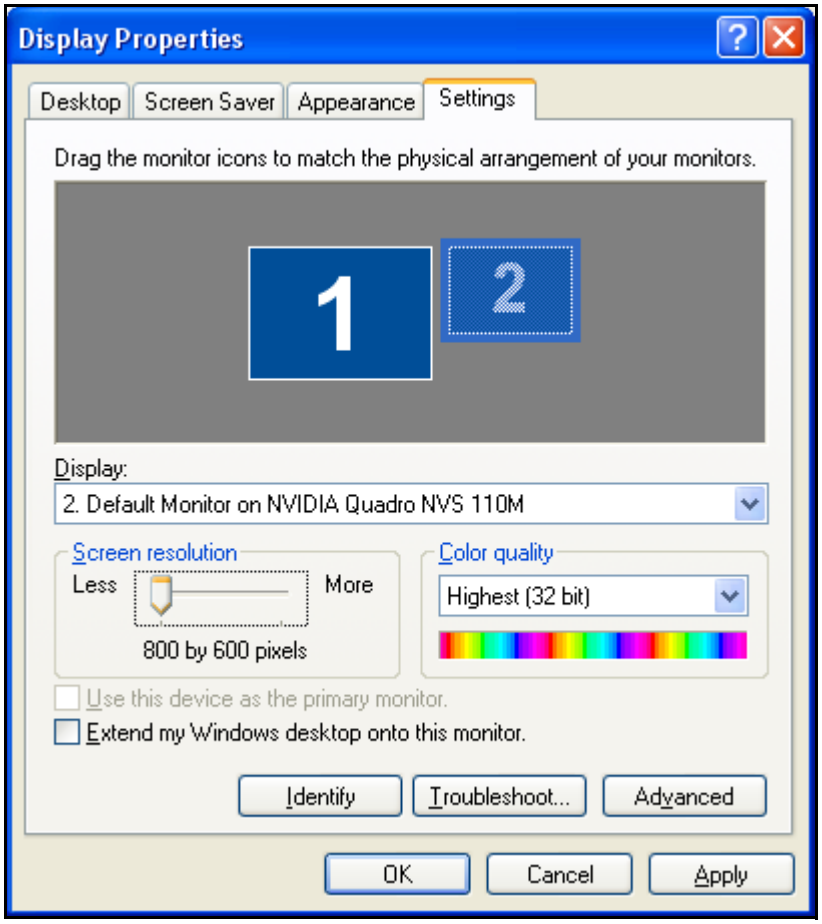


Figure E-1. Settings Tab of the Display Properties Box

4. In the **Screen resolution** section, use the mouse to drag the pointer right or left between **Less** and **More** until "1024 by 768 pixels" appears under the pointer.

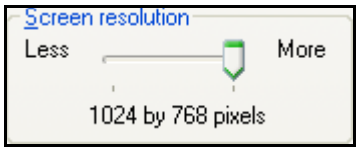


Figure E-2. Desktop Area Section of the Display Properties Box

5. Click **Advanced**. Make sure that Normal size (96 dpi) font is selected.
6. Click **OK** to close the **Display Properties** box.

Setting Up LogoCreator

Before you start using LogoCreator, you should ensure that your PC has the minimum system requirements necessary for operating LogoCreator. Once you verify your system requirements, you can install LogoCreator.

Minimum System Requirements

The PC you are using to run LogoCreator should meet the following minimum requirements.

- 500-MHz Pentium III processor
- 256-MB SDRAM
- 300-MB free disk space
- 100Base-T network connection

Required Operating System and Third-Party Software

Install the LogoCreator software only on a PC running Windows XP or Windows 2000. LogoCreator is incompatible with Windows 95, 98, and NT. Microsoft Internet Explorer minimum version 5.0 is required.

Installing LogoCreator Software

To install LogoCreator on your PC complete the following steps:

1. Insert the LogoCreator CD in the CD-ROM tray. The auto-installer automatically begins the installation process.
2. On the LogoCreator Welcome screen, click **Next**.
3. On the License Agreement screen, read the license agreement.
4. Select the I Accept the License Agreement option, and then click **Next** to continue.
5. On the Destination Folder screen, verify the Destination Folder location or click the **Browse** button to select a new location for the LogoCreator application.
6. Click **Next** to start the installation process.

7. When the installation process finishes, click the **Finish** button. The installation closes.

Removing LogoCreator Software

1. Go to the Windows Control Panel (**Start**>**Settings**>**Control Panel**), and then select **Add/Remove Programs**.
2. Select **IconSet** from the list and follow the instructions provided on-screen.

CAUTION

If you remove IconSet, you will also remove Content Editor, IconLogo SoftPanel, and the IconMaster configuration utility.

Opening the LogoCreator Application

Use one of the following methods to open your LogoCreator application.

- From the Windows **Start** menu, select **All Programs > Harris > LogoCreator > LogoCreator**.
- Double-click on the LogoCreator icon on your desktop.
- Navigate to an existing MG2 file and right-click on the file. Select **Open** from the pop-up menu.

Creating MG2 Logos

LogoCreator allows you to create MG2 files to use with your IconLogo hardware. You can save existing static or animated logos as MG2 files.

Creating a Static MG2 Logo

To create a static MG2 logo, open an existing logo file and then save the logo as an MG2 file. After you save the logo, the logo displays in your LogoCreator workspace.

1. In LogoCreator, open the **Logo Set-Up** dialog.

   When you first open LogoCreator, the **Logo Set-Up** dialog opens automatically. If the **Logo Set-Up** dialog is closed, select **File > New** to open the dialog.

Logo Creator - Logo Set-Up
Set up a logo type.
Open an existing file (MG2) to work with and modify for output.
Open...
Create a new logo with positioning for output.
Logo...
Create an animated logo with positioning for output.
Animated...
Close

Figure E-3. LogoCreator Setup Dialog Box

2. Click the **Logo** button to open the Static Logo dialog.
3. Use the **Logo ID** box to assign the logo to a specific slot on your IconLogo system.
4. Enter a name for the logo in the **Name** box.
5. Click the **Open** button below the **Logo Image Preview** window. The **Open** dialog displays.
6. Select your existing logo file and click the **Open** button to open the logo in the **Static Logo** dialog.

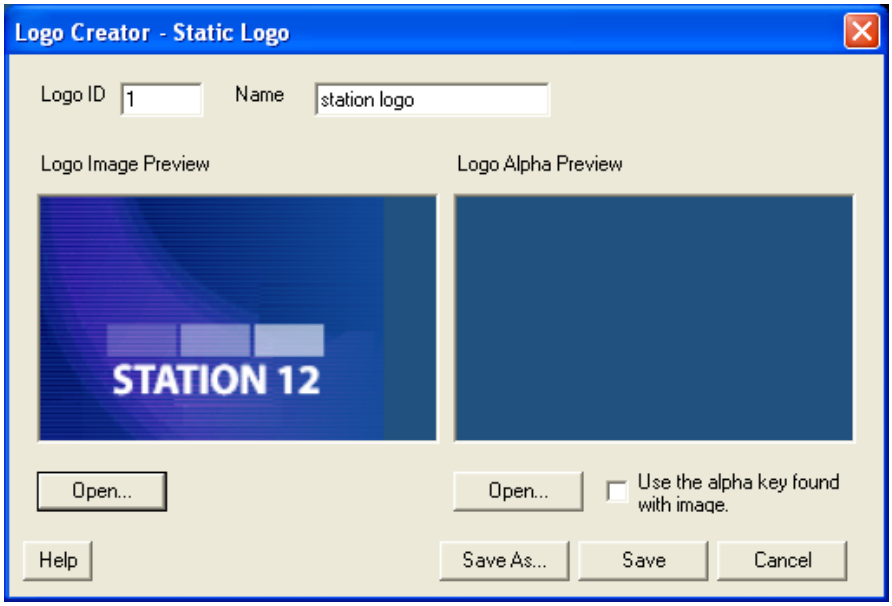


Figure E-4. Static Logo Dialog Box

- A preview of the composited logo displays in the **Logo Image Preview** area.

- A preview of the image alpha displays in the **Logo Alpha Preview** area if the file contains alpha.

Note

An *alpha channel* is an 8-bit layer in a graphics file format that is used for expressing translucency (transparency). Typically, you define the alpha channel on a per-object basis. Different parts of an object will have different levels of transparency depending on how much background you want to show through.

7. Select a file to use as the alpha channel for your logo. You must select a file before you can save the logo.
   - To use the original image's alpha channel, select the "Use the alpha key found with image" checkbox.
   - To use a different image for the alpha channel, clear the "Use the alpha key found with image" checkbox, and then click the **Open** button to select a new file for your alpha channel.
8. Click the **Save** button in the **Static Logo dialog**. The **Save Logo File** dialog opens where you can save your logo as an MG2 file. Once you save the logo as an MG2 file, the logo displays in the LogoCreator workspace.

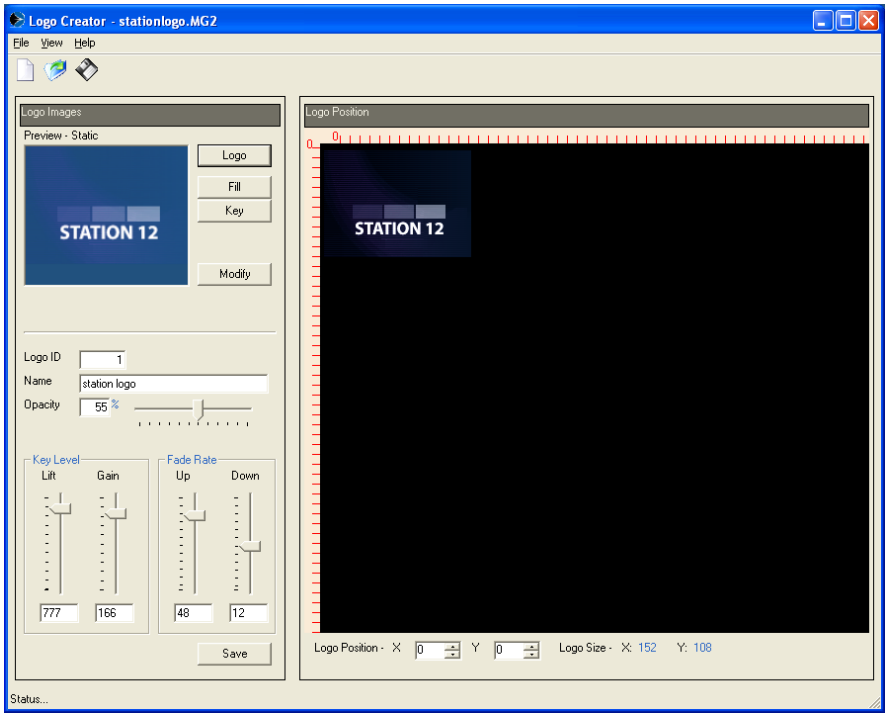


Figure E-5. LogoCreator Work Space

Creating an Animated MG2 Logo

To create an animated MG2 logo, open an existing animation sequence and then save the animation as an MG2 file. After you save the logo, the logo displays in your LogoCreator workspace.

1. In LogoCreator, open the **Logo Set-Up** dialog.

   When you first open LogoCreator, the **Logo Set-Up** dialog opens automatically. If the Logo Set-Up dialog is closed, select **File** > **New** to open the dialog.

Logo Creator - Logo Set-Up
Set up a logo type.
Open an existing file (MG2) to work with and modify for output.
Open...
Create a new logo with positioning for output.
Logo...
Create an animated logo with positioning for output.
Animated...
Close

Figure E-6. LogoCreator Setup Dialog Box

2. Click the **Animated** button to open the Animated Logo dialog.
3. Use the **Logo ID** box to assign the logo to a specific slot on your IconLogo system.
4. Enter a name for the logo in the **Name** box.
5. Click the **Open** button below the Logo Image Preview window. The **Open** dialog displays.
6. In the **Open** dialog, select the first file in your animation sequence.
7. Click the **Open** button to open your animation sequence in the **Animated Logo** dialog.
8. Click the **Show Sequence** button to view the animation files. The **Animated Logo** dialog updates to display the individual frames of the animation.

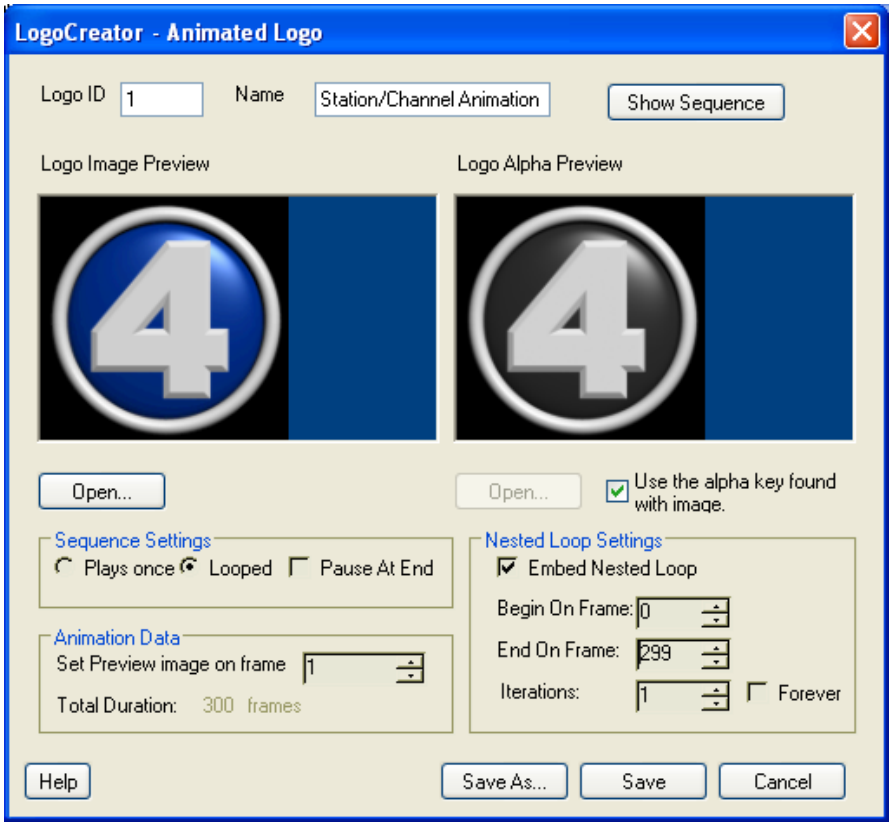


Figure E-7. Animated Logo Dialog Box

9. Use the horizontal scrollbar to preview your animation frames.

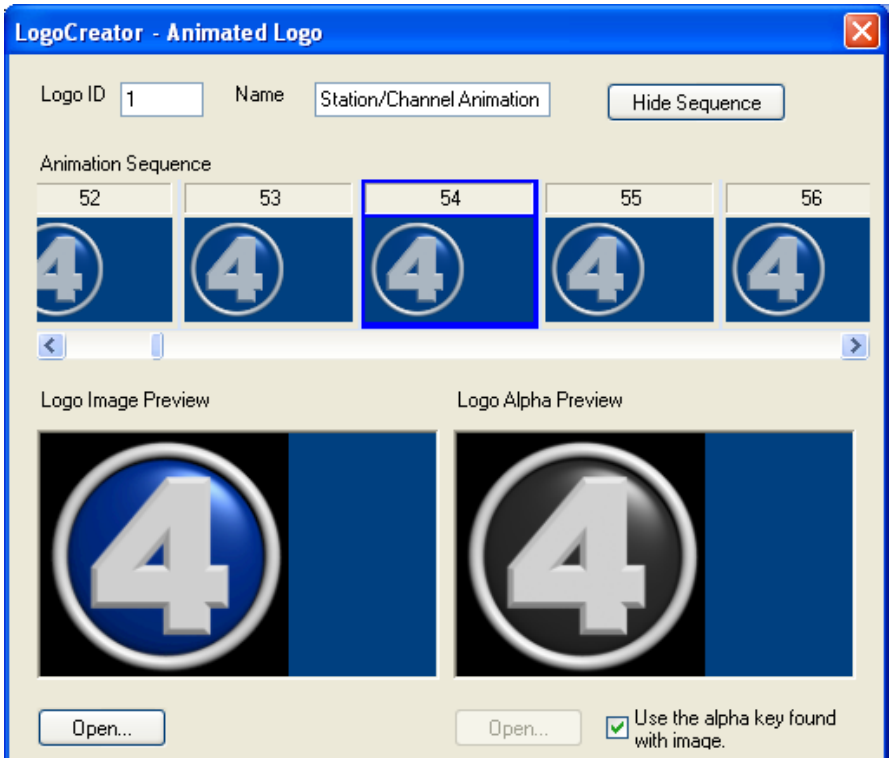
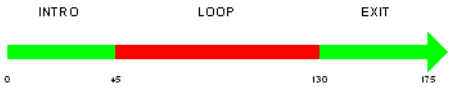


Figure E-8. Using the Horizontal Scrollbar

10. Select the image thumbnails in the Animation Sequence to preview a specific image in your animation. A preview of the composited image displays in the **Logo Image Preview** area.
11. Select a file to use as the alpha channel for your logo. You must select a file before you can save the logo. (See page 328 for a definition of an alpha channel.)
    - To use the original image's alpha channel, select the "Use the alpha key found with image" checkbox.
    - To use a different image for the alpha channel, clear the "Use the alpha key found with image" checkbox and then click the Open button to select a new file for your alpha channel.
12. Set the animation loop options. See Table E-1 for details.

13. Click the **Save** button in the **Animated Logo** dialog. The **Save Logo File** dialog opens where you can save your logo as an MG2 file. Once you save the logo as an MG2 file, the logo displays in the LogoCreator workspace.

Table E-1. Animation Options

Option	Description
Sequence Settings	Sets the animation playback option. • Plays once: Plays the animation once and stops. If you set up a nested loop, it will play for the set number of iterations. • Looped: Loops the animation until playback is stopped. If you set up a nested loop, it will play for the set number of iterations, every time the animation loops. • Pause At End: Pauses the animation before replaying the loop.
Animation Data	Displays animation frame information. • Set Preview image on frame: Sets the entered frame as your preview in the LogoCreator workspace. • Total Duration: Displays the total number of frames in the animation.
Nested Loop Settings	Allows you to loop a segment of the animation that falls between the start frame and end frame you specify. **Example 4-point Animation***  **Example 3-point Animation*** • Embed Nested Loop: Activates the nested loop options so you can loop a segment of the animation. • Begin On Frame: Sets the first frame of the loop. The frame can be any point in the animation. • End On Frame: Sets the last frame of the loop. On output, the segment between the first frame of the nested loop and the last frame of the nested loop will loop. • Iterations: Sets the number of time the nested loop plays before finishing the animation. • Forever: Sets the animation to loop until playback is stopped.

A 4-point logo is an animated logo that will loop only a portion of itself. The animation sequence contains an introductory animation, an animation loop, and an exit animation. A 3-point logo is similar to a 4-point logo, except that it has no exit portion. It can also be visualized as a 4-point logo where the loop-end point is the same as the animation-end point. See page 260 for more information.

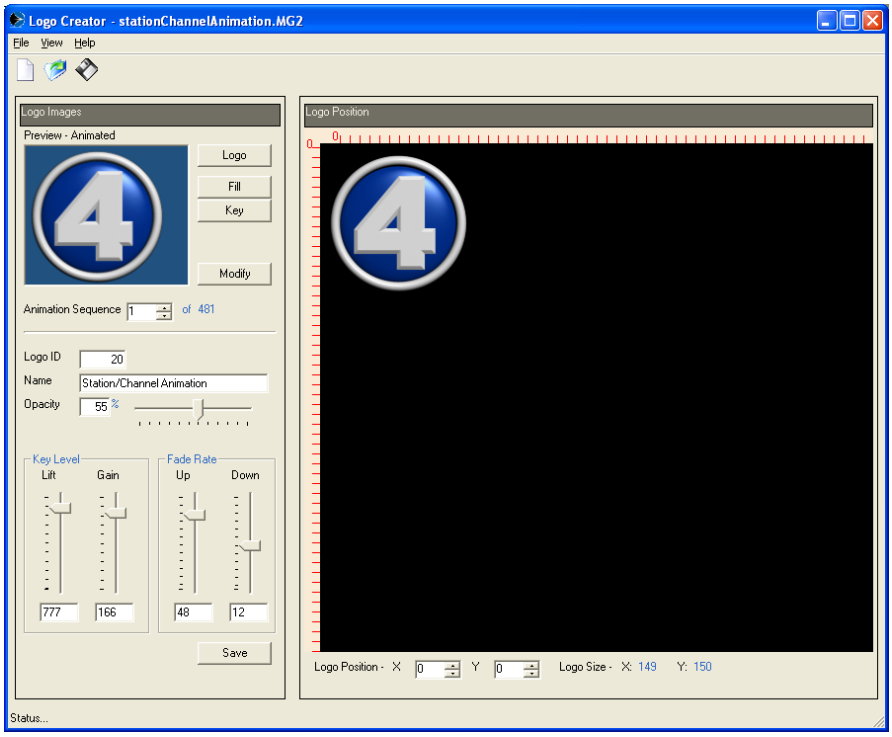


Figure E-9. Save Logo File Dialog Box

Working in LogoCreator

Once you create an MG2 logo you can open the file in LogoCreator, set the logo position, and modify specific logo attributes. LogoCreator also allows you to adjust the noise and strength of the key signal and apply fade on/off transitions to the logo.

Opening a Logo

Use the following steps to open an existing MG2 logo.

Note

When you open LogoCreator the **Logo Set-Up** dialog opens automatically. You can click the **Open** button in the **Logo Set-Up** dialog to access the **Open Logo File** dialog.

1. In LogoCreator, select **File** > **Open** to open the Open Logo File dialog.
2. In the **Open Logo File** dialog, navigate to and select your MG2 logo file.
3. Click the **Open** button. The MG2 logo displays in the LogoCreator workspace.

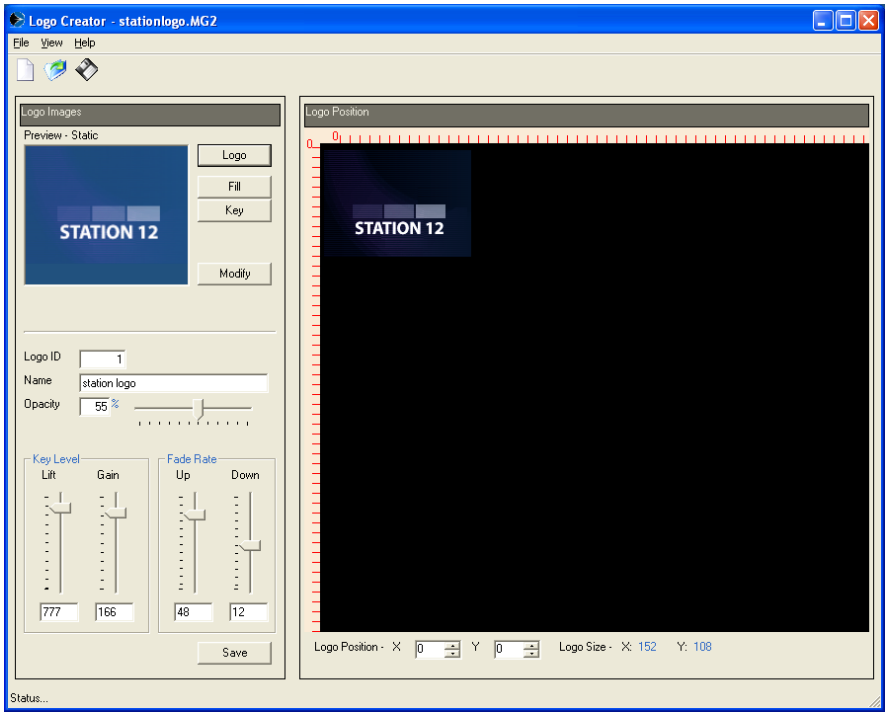


Figure E-10. Opening a Logo

Previewing a Logo

LogoCreator's preview options allow you to view the composited image, the fill channel, and the key channel. Use the preview buttons in LogoCreator to preview your logo.

- Logo button: Click the **Logo** button to view a preview of the composited logo.

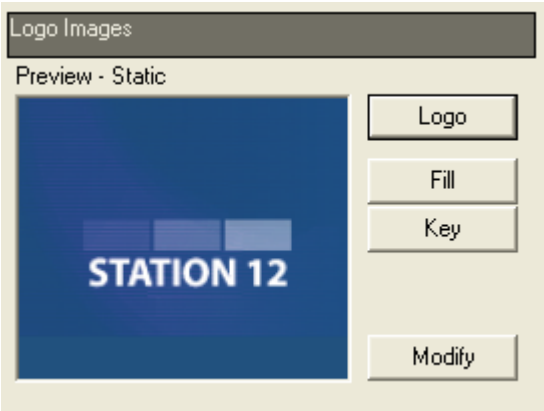


Figure E-11. Viewing a Composited Logo

- Fill button: Click the **Fill** button to view the fill channel for the logo.
- Key button: Click the **Key** button to view the alpha channel for the logo. (See page 328 for a definition of an alpha channel.)
- Animation Sequence: For animated logos, enter a number in the **Animation Sequence** field to preview the animation frame.

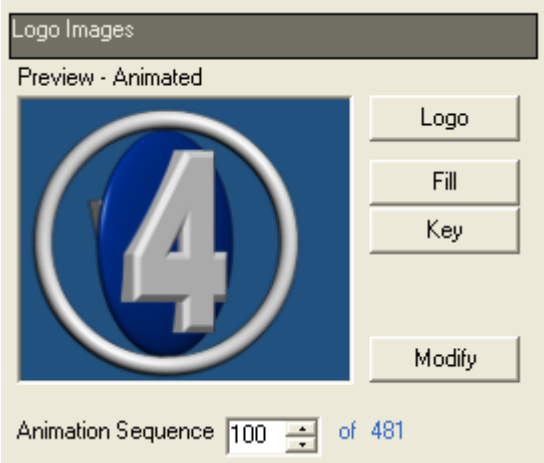


Figure E-12. Viewing an Animation Sequence

Modifying Logo Attributes

The **Modify** button allows you to adjust the logo attributes you defined when you created the logo.

1. Click the Modify button to open the Logo dialog, where you defined the logo attributes.
2. Use the options to adjust the logo properties.
3. Click Save to save the changes and return to the LogoCreator workspace.

   For details on the available options in the Logo dialog, see the topics in “Creating MG2 Logos” on page 326.

Positioning a Logo

Once you open your MG2 logo, you can set the onscreen position for the logo in the LogoCreator workspace.

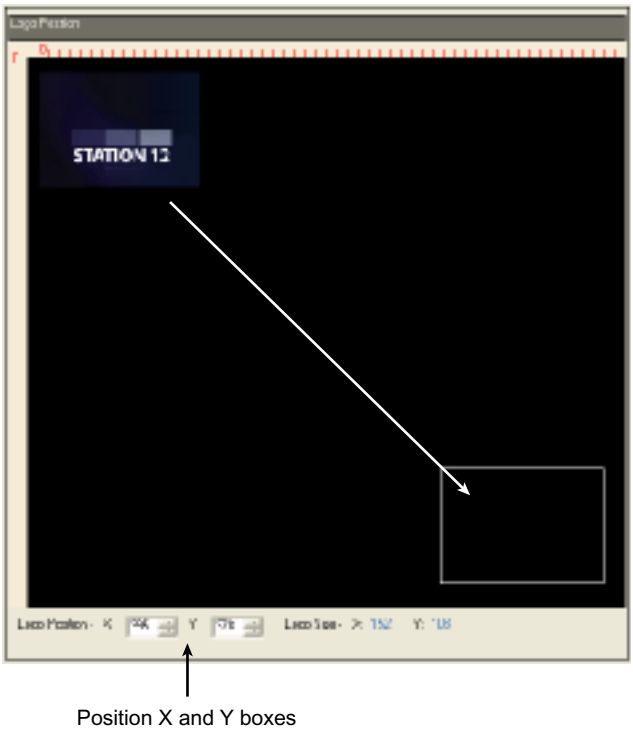


Figure E-13. Positioning a Logo

Use one of the following methods to position your logo.

- Drag the logo to a new position.
- Use the **Logo Position X** and **Logo Position Y** boxes below the workspace to place your logo in an exact position. You can enter positive or negative values.

  The X value moves the logo horizontally and the Y value moves the logo vertically by the set number of pixels.

Changing the Logo ID

The Logo ID assigns the logo to a specific slot on your IconLogo system.

1. Enter a new slot number in the Logo ID box to change the slot.
2. Click the **Save** button at the bottom of the LogoCreator window to save the change.

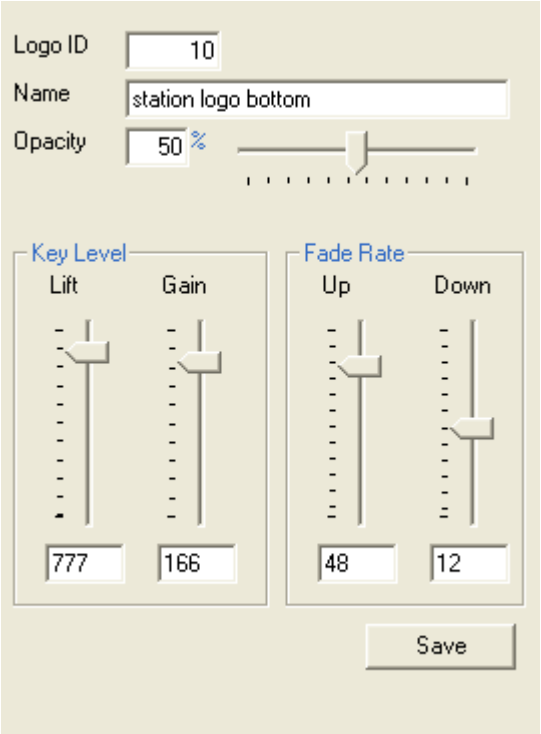


Figure E-14. Changing a Logo ID

Changing the Logo Name

The Logo name sets the name for the MG2 file.

1. Enter a new name in the Name box.
2. Click the Save button at the bottom of the LogoCreator window to save the change.

Adjusting the Logo Opacity

The Opacity sets the overall transparency level for the composited logo.

1. Use the Opacity field or slider to adjust the logo transparency.
   - 100% sets the logo as completely opaque.
   - 0% sets the logo as completely transparent.
2. Click the Save button at the bottom of the LogoCreator window to save the change.

Adjusting the Key Level

The Key Level options allow you to adjust the noise and the strength of the key signal. Use the Lift to adjust the noise and use the Gain to adjust the strength.

- Lift: Use the Lift slider or enter a value in the Lift box to adjust the noise level of the key signal. Raising the Lift decreases the noise, which also decreases the signal slightly.

  Lift values range from 0 to 876.

- Gain: Use the Gain slider or enter a value in the Gain box to adjust the strength of the key signal. Raising the Gain increases the strength of the signal.

  Gain values range from 0 - 200%.

Adjusting the Fade Rate

The Fade Rate options allow you to adjust the transition duration for fading logos on or off. Use the Up and Down options to adjust the fade rate.

- Up: Use the Up slider or enter a value in the Up box to adjust the transition duration for fading the logo on air.

  Up values range from 1 - 59 seconds.

- Down: Use the Down slider or enter a value in the Down box to adjust the transition duration for fading the logo off air.

  Down values range from 1 - 24 frames.

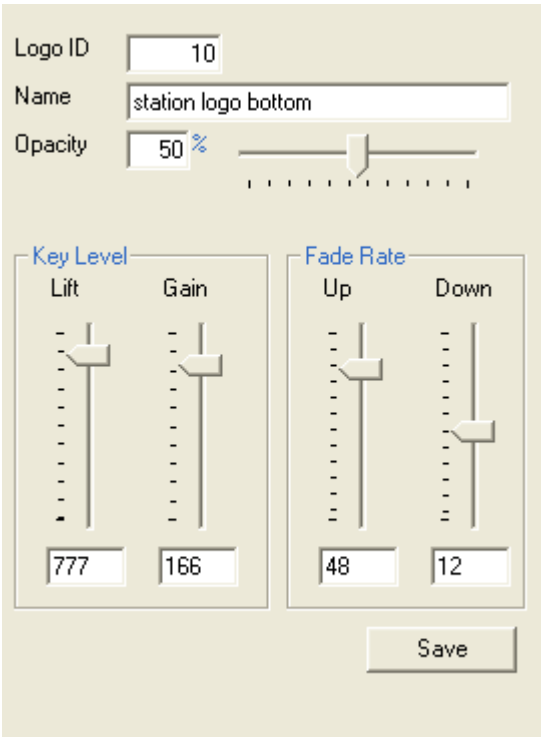


Figure E-15. Adjusting the Fade Rate

Connecting to an IconLogo System

The Logo Transfer Plug In utility allows you to transfer logos from a PC to an IconLogo system using a device folder that displays as a standard Windows folder on your PC.

The device folder uses the IconLogo system's username, password, and IP address to establish a connection from your PC to your IconLogo system. When you open the IconLogo device folder, the current logos, logo IDs, logo names, and logo types contained on the IconLogo system display in the folder.

Creating a New Device Folder

Use the following steps to create a new device folder in Windows that connects to your IconLogo system.

1. From your Windows desktop, open Windows Explorer or My Computer.
2. Navigate to a location on your computer where you want to create the new device folder.
3. In the folder window, select **File > New > New Device**. The **New Device Properties** dialog opens.

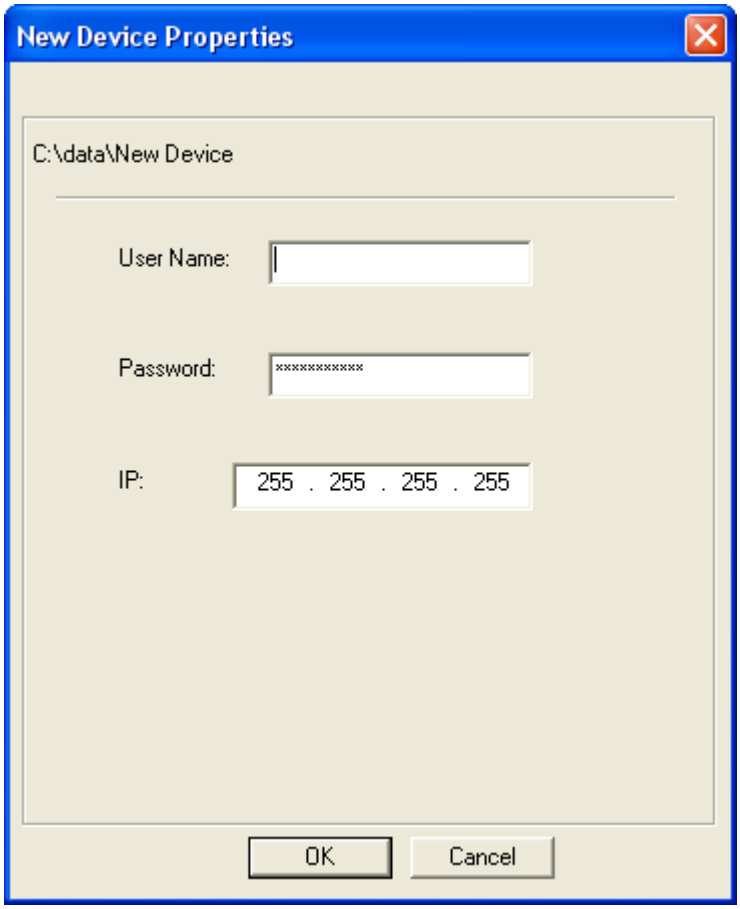


Figure E-16. New Device Properties Dialog Box

4. Enter the following information in the **New Device Properties** dialog:
   - Username: Enter a valid username for the IconLogo system.
   - Password: Enter a valid password for the specified username.
   - IP: Enter the IP address of the IconLogo system.
5. Click **OK** in the **New Device Properties** dialog to establish a connection to the IconLogo system and to create the new device folder.
6. Double-click on the new device folder to view the current logos on the IconLogo system.

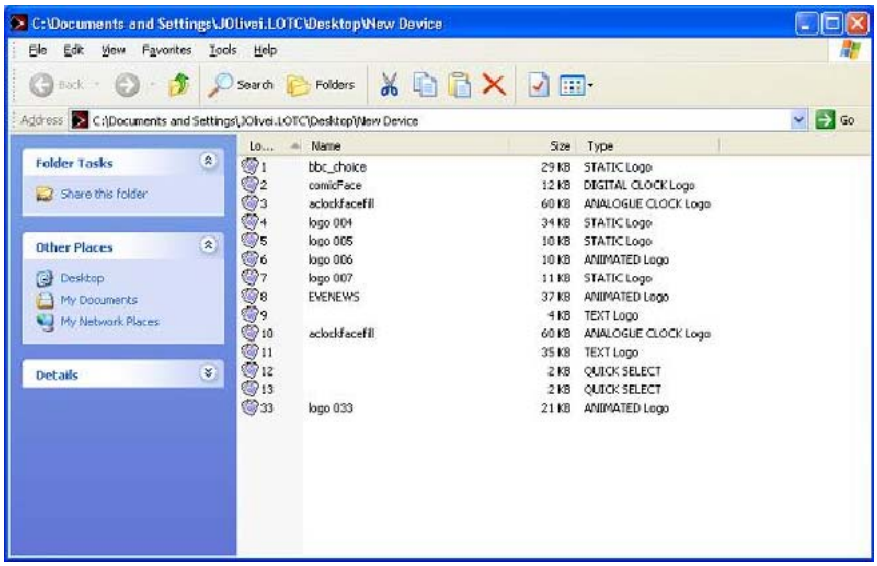

C:\Documents and Settings\JOlivei.LOTC\Desktop\New Device
File Edit View Favorites Tools Help
Search Folders
Address C:\Documents and Settings\JOlivei.LOTC\Desktop\New Device
Go
Folder Tasks
Share this folder
Other Places
Desktop
My Documents
My Network Places
Details
Lo... Name Size Type
1 bbc_choice 29 KB STATIC Logo
2 comicFace 12 KB DIGITAL CLOCK Logo
3 aclockfacefill 60 KB ANALOGUE CLOCK Logo
4 logo 004 34 KB STATIC Logo
5 logo 005 10 KB STATIC Logo
6 logo 006 10 KB ANIMATED Logo
7 logo 007 11 KB STATIC Logo
8 EVENEWS 37 KB ANIMATED Logo
9 4 KB TEXT Logo
10 aclockfacefill 60 KB ANALOGUE CLOCK Logo
11 35 KB TEXT Logo
12 2 KB QUICK SELECT
13 2 KB QUICK SELECT
33 logo 033 21 KB ANIMATED Logo

Figure E-17. Viewing Current Logos

Transferring MG2 Logos to IconLogo

After you create a new device folder that connects to your IconLogo system, you can transfer MG2 logos from your PC to IconLogo. To transfer logos you can select the MG2 files in Windows and drag them to your device folder.

Note

You can only transfer MG2 logos to the IconLogo system. If you want to transfer a different logo format, save the file as an MG2 file in LogoCreator first, and then transfer the logo.

1. Use Windows Explorer or My Computer to navigate to your device folder, and then open the folder. The current IconLogo system logos display in the window.
2. In a new instance of Windows Explorer or My Computer, navigate to the MG2 logo your want to assign to your IconLogo system.
3. Select the MG2 logo and drag it to your device folder. The Load To window displays.

4. Use the following options in the Load To window to set the transfer instructions.

Table E-2. Load To Window Options

Option	Description
Near Line Storage options	Transfers a logo to the IconLogo system and writes the logo to the removable media selected in the Near Line Storage list
On-Line checkbox	Loads a logo to the IconLogo system's RAM (random access memory) once you transfer the logo; clear the checkbox if you do not want to load the logo immediately
Logo ID options	Assigns a logo to a slot on the IconLogo system • Use Logo ID: Assigns the logo to the slot set as the Logo ID. You can set the Logo ID in LogoCreator • Use Free Slot ID: Assigns the logo to the first available free slot on the IconLogo system

5. Click **OK** to transfer the logo with the applied settings.

Appendix F

Content Editor Software Application

Overview

Content Editor is a Windows-based software application that can access text from various sources for display as Text Crawl or Text Titling logos in the IconLogo system.

The following topics are covered in this chapter:

- “Installing the Software” on page 344
- “Using the Font Utility” on page 346
- “Content Editor Operation” on page 346

Content Editor Installation

You must install certain required hardware and software before you can install and operate the Content Editor software. See the requirements for LogoCreator installation on page 325 for these specifications.

Required Third-Party Software

The following additional third-party software is required:

- Microsoft .NET. When installing the Content Editor software, you will be prompted as to whether you want to install this application.

  When installing .NET, you will need to reboot the PC after installing the software.

  If you already have .NET installed on your PC, do not reinstall it.

Installing the Software

Content Editor uses the InstallShield process, which supports new installations, reinstallations, and upgrades. To install the Content Editor software, complete these steps:

1. If an existing version of Content Editor is installed on the PC, uninstall it, and then restart the PC.
2. Close all other applications running on the PC and insert the Installation CD into the PC CD-ROM drive.
3. Double click **Setup.exe** if the setup does not start automatically.
4. When the **Welcome** box appears, click **Next**.
5. When the **Warning**! box appears, click **Next**.
6. When the **Microsoft.NET** framework box appears, follow the instructions, and then click **Next**.
7. When the **Select Features** box appears, click the **+** symbol from the complete file list on the left side of the window (see Figure F-1).

   This displays all of the software that can be installed. The default is to install all of the software.

   To change the default installation locations, click the **Browse** button and then follow the instructions.

   To deselect a specific software option, click the arrow to the left of the option and then select **X** from the menu (see Figure F-2).

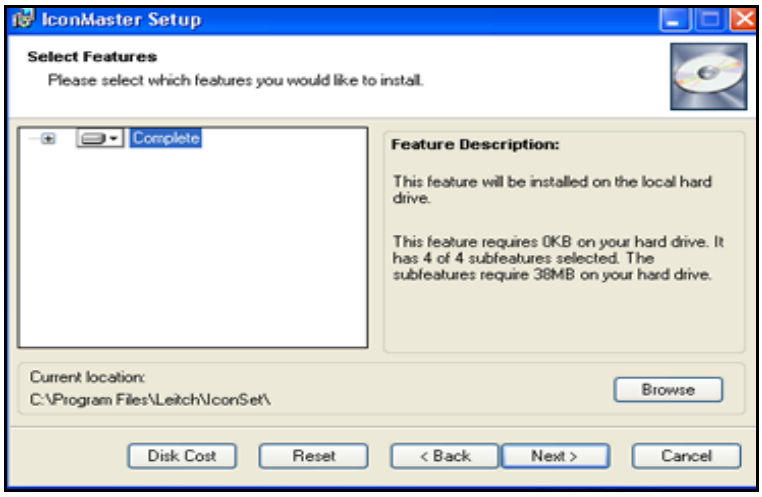

IconMaster Setup
Select Features
Please select which features you would like to install.
Complete
Feature Description:
This feature will be installed on the local hard drive.
This feature requires 0KB on your hard drive. It has 4 of 4 subfeatures selected. The subfeatures require 38MB on your hard drive.
Current location:
C:\Program Files\Leitch\IconSet\
Browse
Disk Cost
Reset
< Back
Next >
Cancel

Figure F-1. Select Features Box

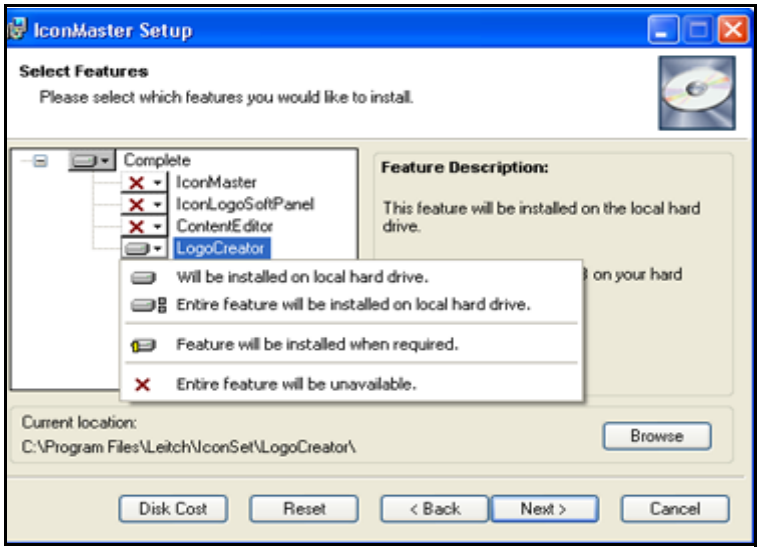


Figure F-2. Selecting or Deselecting a Feature

8. Click **Next** to continue, and then click **Next** to start the installation.
9. Click **Finish** when the **Setup Complete** box appears.

Removing Content Editor Software

1. Go to the Windows Control Panel (**Start>Settings>Control Panel**), and then select **Add/Remove Programs**.
2. Select **IconSet** from the list and follow the instructions provided on screen.

CAUTION

If you remove IconSet, you will also remove LogoCreator, IconLogo SoftPanel, and the IconMaster configuration utility.

Content Editor Operation

Refer to the Content Editor manual included on the IconMaster Soft Tools CD.

Using the Font Utility

1. To start Content Editor, double click on the IconLogo Content Editor icon found on your desktop, or click on **Start → Programs → Harris → IconTools → IconLogo Content Editor**.
2. From the File menu, select Preferences to set the IP address, username, and password for your IconLogo system, as well as the output file location for your saved text.

   These preferences need to be set for both the Crawl Editor and the Title Editor. Alternate between the two by selecting the appropriate tab at the top left of the window. Crawl Editor and Title Editor can be set to communicate with separate IconLogo systems. See Figure F-3 and Figure F-4.

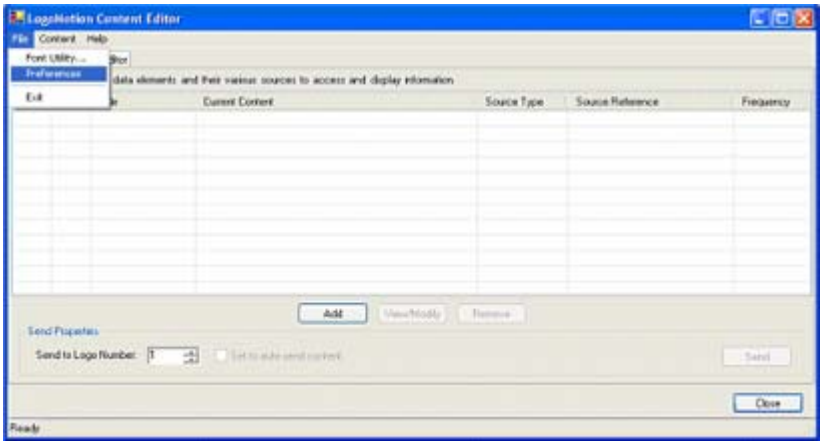


Figure F-3. Content Editor Window

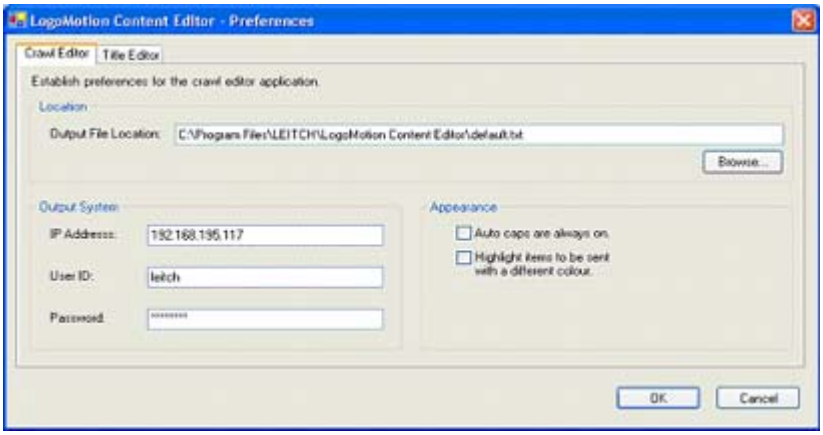


Figure F-4. Content Editor Preferences Window

3. To start **Font Utility**, select **File>Font Utility** from the Content Editor menu.

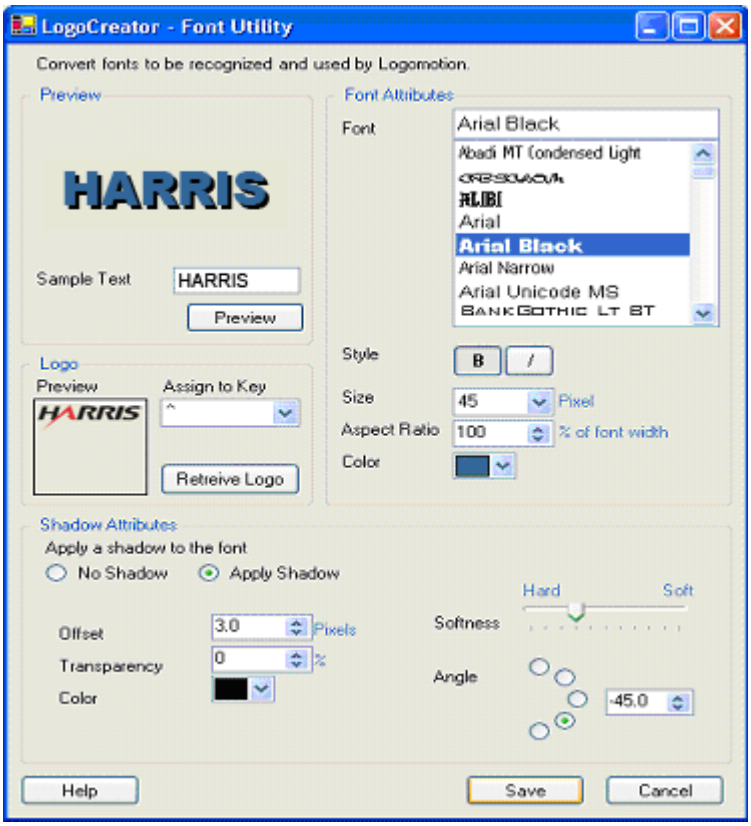


Figure F-5. Font Utility Window

Creating Fonts

1. Select a font type using the **Font** list box option under the **Font Attributes** header.
2. Set the **Style** to Bold or Italics by selecting **B** or **I**, respectively.
3. Set the height of the font by selecting the number appropriate number of pixels in the **Size** list box.

   The number of pixels is limited to 60.
4. Adjust the width of the font by changing the value in the **Aspect Ratio** list box.
5. Adjust the font color using the **Color** list box.
6. Enable the **Shadow Attributes Apply Shadow** button to adjust the shadowing options.
   - **Offset** adjusts the width in pixels of the shadow.
   - **Transparency** adjusts the visibility of the shadowing.
   - **Color** changes the color of the shadowing.

- **Softness** blends the shadowing to create sharp (**Hard**) or blended (**Soft**) edges.
- **Angle** changes the trajectory of the shadowing as indicated by the buttons and the list box.

7. Click **Char Map** to preview each character in the font.

   Hovering the mouse over a character shows its ASCII value in HEX.

   To display non-English characters, the Font Utility uses the Windows-1252 code page to map the upper 128 ASCII codes.
8. Click **Preview** to view the font after the font is customized.
9. Click **Save**. See “Saving Fonts and Logos” on page 348. for more information.

Assigning Logos

The Font Utility allows you to assign a Logo to the ‘^’ character, which can then be inserted into the content of a Text Crawl or Text Title. Follow these steps to use this function:

1. Click **Retrieve Logo** in the Logo area of the Window.
2. Find the Logo file and then select it.

   The Logo height is restricted to 60 pixels.
3. Click **Save**. See “Saving Fonts and Logos” on page 348 for more information.

Note

A logo must be saved with a font in order to operate correctly.

Saving Fonts and Logos

After you click **Save** (as described on page 348) a new window appears (Figure F-6 on page 349).

To save a custom font:

1. Select which font you want to overwrite using buttons **Font 1**, **Font 2**, or **Font 3**. (The descriptions on page 272 show how these fonts will appear onscreen.)

   You can only save up to three fonts and logos. Custom fonts and logos will be overwritten when a new font is saved under one of these three font options.
2. Select **Crawl Creator** or **Title Creator** as the destination for uploading the font.

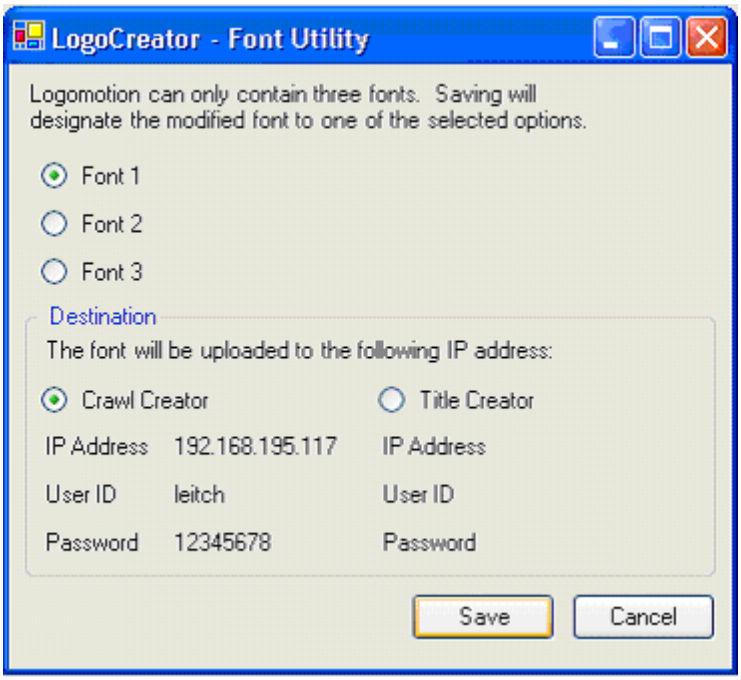


Figure F-6. Saving a Custom Font

Note

Fonts and logos are saved together as one font and cannot be saved separately.

Using your Custom Fonts and Logos

1. To use a custom font and logo, after saving the font, you need to reboot the IconMaster system for the new font settings to take effect.
2. The custom font and logo can be applied to any Text Crawl or Text Titling logo. See page 237 for details.

Controlling multiple IconLogos

To control more than one IconLogo system simultaneously, the IconLogo Content Editor can be directed to use different configuration files when launched.

1. Duplicate the Content Editor's desktop shortcut by copying it and pasting it.
2. Rename the desktop shortcuts to give them meaningful names.
3. Modify the target fields of the shortcuts to specify different Content and Title XML files.
   a. Right-click one of the shortcuts.
   b. Select Properties. The shortcut's Properties window opens.
   c. Edit the Target field to add two options:

/content=<fileName1> and /title=<fileName2>.

<filename1> and <filename2> must be unique filenames, ideally with an XML extension. We recommend you do not use the default configuration filenames which are LogoMotionContent.xml and LogoMotionTitle.xml.

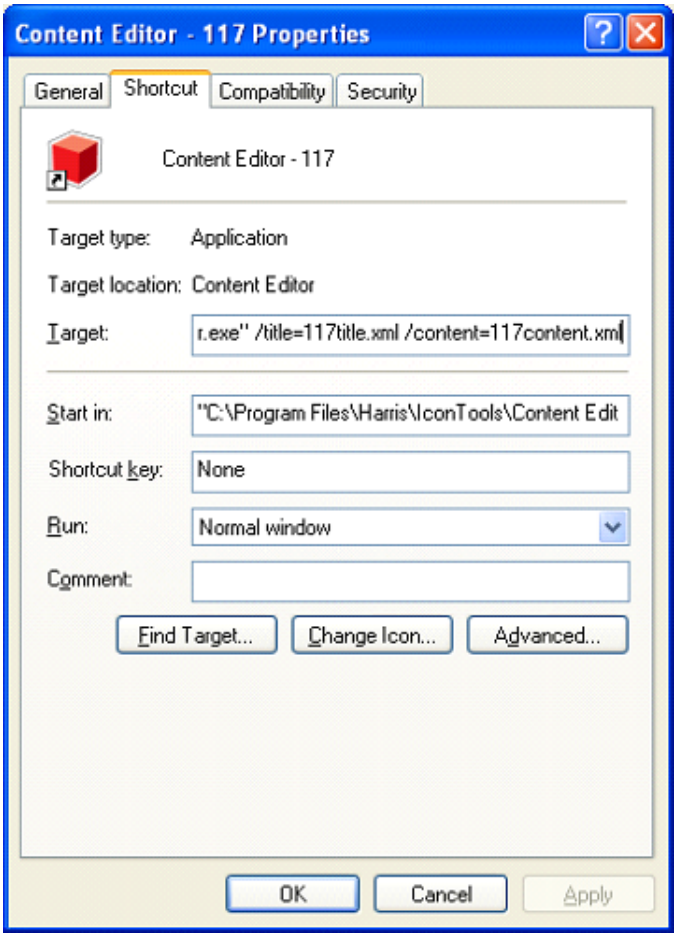


Figure F-7. Figure 1-3. Edit Content Editor Shortcut

d. Click OK to save your changes.

e. Repeat this procedure with the other shortcuts.

Instances of the IconLogo Content Editor launched from these shortcuts will have different parameters than the default shortcut.

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